MEMO - DRAFT

ARCADIS Design & Consultancy for natural and built assets

To:

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From:

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Date:

December 26, 2018

Arcadis Project No.:

B0064607.2018

Subject:

RACER Pontiac North Campus

USPS Parcel Data Summary (2013 MDEQ Part 201 Generic Clean Up Criteria)

Historical soil and groundwater data for the USPS Parcel were screened against existing 2013 MDEQ Part 201 Generic Clean Up criteria (2013 criteria) dated January 10, 2018 with GSI criteria updated June 25, 2018. Exceedances of the 2013 criteria are depicted on the attached databox figures and listed below.

Media	Substance	Criteria Exceeded
Soil	1,2-Dibromo-3-chloropropane	RDWP, NRDWP
	1,2-Dichlorobenzene	GSIP
	2,4-Dimethylphenol	RDWP, NRDWP, GSIP
	2-Methylnaphthalene	RDWP, GSIP
	Acenaphthene	GSIP
	Aluminum	SDBL, RDWP, NRDWP
	Antimony	RDWP, NRDWP, GSIP, NRDC
	Arsenic	SDBL, SSBC, RDWP, NRDWP, GSIP, NRDC
	Atrazine	RDWP, NRDWP

Media	Substance	Criteria Exceeded
	Barium	SDBL, SSBC, RDWP, NRDWP, GSIP
	Benzene	RDWP, NRDWP
	Benzo(a)pyrene	NRDC
	Butylbenzylphthalate	CSAT
	Cadmium	SDBL, RDWP, NRDWP, GSIP
	Carbazole	RDWP, GSIP
	Chromium	SSBC, RDWP, NRDWP, GSIP, NRPSIC
	Cobalt	SDBL, SSBC, RDWP, NRDWP, GSIP
	Copper	SDBL, RDWP, NRDWP, GSIP
	Cyanide (total)	SDBL, RDWP, NRDWP, GSIP
	Dibenzofuran	GSIP
	Dichloromethane	RDWP, NRDWP
	Di-n-Butylphthalate	GSIP
	Ethylbenzene	RDWP, NRDWP, GSIP
	Fluoranthene	GSIP
	Fluorene	GSIP
	Iron	SDBL, RDWP, NRDWP
	Lead	SDBL, SSBC, RDWP, NRDWP, GSIP, NRDC
	Magnesium	RDWP, NRDWP
	Manganese	SDBL, SSBC, RDWP, NRDWP, GSIP, NRPSIC
	Mercury	SDBL, RDWP, NRDWP, GSIP
	Naphthalene	RDWP, GSIP
	Nickel	SDBL, SSBC, RDWP, NRDWP, GSIP
	Phenanthrene	RDWP, GSIP
	Phenol	RDWP
	Selenium	SDBL, RDWP, NRDWP, GSIP
	Silver	SDBL, RDWP, NRDWP, GSIP
	Tetrachloroethene	RDWP, NRDWP, GSIP
	Thallium	RDWP, NRDWP, GSIP
	Toluene	RDWP, NRDWP, GSIP
	Total PCBs	NRDC
	Total Xylenes	RDWP, NRDWP, GSIP
	Trichloroethene	RDWP, NRDWP, NRSVII
	Vanadium	SSBC, RDWP
	Zinc	SDBL, SSBC, RDWP, NRDWP, GSIP

Media	Substance	Criteria Exceeded
Groundwater	1,4-Dioxane	RDW
	2,4-Dimethylphenol	RDW, NRDW, GSI
	Acetone	RDW, NRDW, GSI
	Antimony	RDW, NRDW
	Arsenic	RDW, NRDW, GSI
	Barium	RDW, NRDW, GSI
	Benzene	RDW, NRDW
	Beryllium	RDW, NRDW
	bis(2-Ethylhexyl)phthalate	RDW, NRDW, GSI
	Cadmium	GSI
	Chromium	RDW, NRDW, GSI
	Cobalt	RDW
	Copper	GSI
	Dichloromethane	RDW, NRDW
	Ethylbenzene	GSI
	Fluorene	GSI
	Iron	RDW, NRDW
	Lead	RDW, NRDW, GSI
	Manganese	RDW, NRDW, GSI
	Mercury	GSI
	Naphthalene	GSI
	Nickel	RDW, NRDW, GSI
	Phenanthrene	GSI
	Phenol	GSI
	Silver	GSI
	Thallium	RDW, NRDW, GSI
	Total Dissolved Solids	RDW, NRDW, GSI
	Total PCBs	RDW, NRDW, GSI
	Total Xylenes	GSI
	Vanadium	RDW, NRDW, GSI
	Vinyl Chloride	RDW, NRDW, GSI
	Zinc	GSI

SOIL

SDBL – State Default Background Levels

SSBC – Site Specific Background Criteria

RDWP – Residential Drinking Water Protection

NRDWP- Non-Residential Drinking Water Protection

GSIP – Groundwater Surface Water Interface Protection

NRSVII – Non-Residential Soil Volatilization to Indoor Inhalation Criteria

NRPSIC – Non-Residential Particulate Soil Inhalation Criteria

NRDC – Non-Residential Direct Contact Criteria

CSAT – Soil Saturation Concentration

GROUNDWATER

NRDW – Non-Residential Drinking Water Criteria

RDW – Residential Drinking Water Criteria

GSI – Groundwater Surface Water Interface Criteria

1 – MDEQ Part 201 Generic Cleanup Criteria – Non-Residential Soil and Groundwater Criteria, Table 1, Table 2 and Table 3, dated January 10, 2018; GSI criteria updated June 25, 2018.

Proposed corrective measures associated with the USPS Parcel are currently anticipated to include the following:

- Deed restrictions which limit the use of the property to commercial or industrial uses (non-residential)
    - require the existing soil caps remain in place to eliminate the direct contact exposure pathway
    - limit the ability to excavate or construct any sub-grade structures without properly managing/disposing of excavated material and implementing appropriate health and safety procedures as required by MDEQ soil management requirements and OSHA
    - prohibits the use of groundwater on the property
- Off-site groundwater ordinance which prohibits the installation of wells for groundwater use within the ordinance area
- Groundwater monitoring program to demonstrate that contaminant concentrations and distribution are stable and/or decreasing
- Expected maintenance of a TSCA cap over PCB-impacted soils.

Attachments - Figures

Figure 1A PCB Exceedances in Soil

Figure 1B PCB Exceedances in Soil

Figure 1C VOC and SVOC Exceedances in Soil

Figure 1D Inorganics Exceedances in Soil

Figure 1E Inorganics Exceedances in Soil

Figure 1F Inorganics Exceedances in Soil

Figure 1G Inorganics Exceedances in Soil

Figure 1H Inorganics Exceedances in Soil

Figure 1I Inorganics Exceedances in Soil

Figure 2A PCB Exceedances in Groundwater

Figure 2B VOC and SVOC Exceedances in Groundwater

Figure 2C Inorganics Exceedances in Groundwater

Figure 2D Inorganics Exceedances in Groundwater

Figure 2E Total Dissolved Solids Exceedances in Groundwater

Figure 2F 2013 MDEQ Part 201 Generic Cleanup Criteria Tables

Attachments – Tables

Soil

Mannik and Smith Summary of Soil Sample Analytical Results

Table Set 1 - Other – Inorganics, Misc., PCB, and VOC – SVOC Soil

Table Set 2 - Soil SB Analytical PCB Memo

Table 4-3 – SHI Inorganic, Misc., PCB, and VOC – SVOC Soil

Table 4-19 W-01 – Inorganic, Misc., PCB, and VOC – SVOC Soil

Table 4-28 W-08 – Inorganic, Misc., PCB, and VOC – SVOC Soil

Table 4-29 W-09 – Inorganic, Misc., PCB, and VOC – SVOC Soil

Table 4-31 W-10 – Inorganic, Misc., PCB, and VOC – SVOC Soil

Groundwater

Table Set 1 - Other – Inorganics, Misc., PCB, and VOC – SVOC Groundwater

Table 4-4 – SHI 4-70a - Inorganic, Misc., PCB, and VOC – SVOC Groundwater

Table 4-21 W-01 – Inorganic, Misc., PCB, and VOC – SVOC Groundwater

Table 4-28 W-08 – Inorganic, Misc., PCB, and VOC – SVOC Groundwater

Table 4-30 W-09 – Inorganic, PCB, and VOC – SVOC Groundwater

Table 4-33 W-10 – Inorganic, Misc., PCB, and VOC – SVOC Groundwater

Table 4-69 DG Shallow – Inorganic, PCB, and VOC – SVOC Groundwater

FIGURES

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Reqd) LYR:(On)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD\18101-DWG\FIG1A-DATABOX.DWG LAYOUT: 1A SAVED: 12/7/2018 11:59 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/7/2018 12:37 PM BY: STOWELL, GARY
XREFS:
X-PNC-DL
IMAGES:

AOIW9–C04	
Date	03/02/05
Depth (ft bgs)	11 – 11.5
Total PCBs	17*

AOIW9–C21	
Date	03/11/05
Depth (ft bgs)	2 – 2.5
Total PCBs	53*

AOIW9–C39	
Date	05/09/05
Depth (ft bgs)	2 – 2.3
Total PCBs	170*

SB–121–18	
Date	06/22/18
Depth (ft bgs)	16 – 18
Total PCBs	48* [55*]

SB–46–14	
Date	06/25/14
Depth (ft bgs)	20 – 22
Total PCBs	43*

SB–56–14	
Date	07/31/14
Depth (ft bgs)	16 – 18
Total PCBs	18*

SB–75–15	
Date	04/28/15
Depth (ft bgs)	4 – 5
Total PCBs	24*

SW9–09–W2S2					
Date	01/03/02	01/29/02	01/29/02	01/29/02	01/29/02
Depth (ft bgs)	2 – 4	6 – 8	8 – 10	10 – 12	12 – 14
Total PCBs	32*	60*	45*	16*	33*

SW9–09–W1N2				
Date	01/03/02	01/03/02	01/29/02	01/29/02
Depth (ft bgs)	4 – 6	6 – 8	8 – 10	10 – 12
Total PCBs	48*	23*	45*	24*

SW9–09–E2N2		
Date	01/22/02	01/22/02
Depth (ft bgs)	2 – 4	4 – 6
Total PCBs	41*	17*

AOIW9–C06	
Date	03/02/05
Depth (ft bgs)	2 – 2.5
Total PCBs	16*

AOIW9–C22	
Date	03/11/05
Depth (ft bgs)	2 – 2.5
Total PCBs	33*

AOIW9–CSW2	
Date	05/11/05
Depth (ft bgs)	0 – 4
Total PCBs	27*

SW9–09–W2S1		
Date	01/17/02	01/31/02
Depth (ft bgs)	8 – 10	10 – 12
Total PCBs	35*	18*

SW9–09–E3S1		
Date		01/31/02
Depth (ft bgs)		10 – 12
Total PCBs		16*

SW9–09–E3N2		
Date	02/13/02	02/13/02
Depth (ft bgs)	0 – 2	8 – 10
Total PCBs	23*	29*

SW9–09–E1S2		
Date	01/03/02	01/03/02
Depth (ft bgs)	2 – 4	4 – 6
Total PCBs	45*	30*

SW9–09–E4S2		
Date		01/31/02
Depth (ft bgs)		0 – 2
Total PCBs		20*

AOIW9–C13	
Date	03/02/05
Depth (ft bgs)	2 – 2.5
Total PCBs	20*

AOIW9–C23	
Date	05/09/05
Depth (ft bgs)	2 – 2.3
Total PCBs	25*

AOIW9–UCNW	
Date	06/03/05
Depth (ft bgs)	1 – 2
Total PCBs	490*

SW9–09–W1	
Date	01/03/02
Depth (ft bgs)	6 – 8
Total PCBs	17*

SW9–09–S1	
Date	01/29/02
Depth (ft bgs)	8 – 10
Total PCBs	22*

SW9–09–E1	
Date	01/04/02
Depth (ft bgs)	6 – 8
Total PCBs	27*

SW9–09–N1		
Date	01/03/02	02/19/02
Depth (ft bgs)	8 – 10	12 – 14
Total PCBs	20*	24*

AOIW9–C14	
Date	03/02/05
Depth (ft bgs)	2 – 2.5
Total PCBs	61*

AOIW9–C32	
Date	05/09/05
Depth (ft bgs)	2 – 2.3
Total PCBs	170*

AOIW9–V002	
Date	03/02/05
Depth (ft bgs)	2 – 2.5
Total PCBs	37*

SW9–09–W2N2	
Date	01/17/02
Depth (ft bgs)	6 – 8
Total PCBs	30*

SW9–09–E2	
Date	01/04/02
Depth (ft bgs)	8 – 10
Total PCBs	16*

SW9–09–W2N1	
Date	02/12/02
Depth (ft bgs)	10 – 12
Total PCBs	24*

AOIW9–C19	
Date	03/11/05
Depth (ft bgs)	2 – 2.5
Total PCBs	21*

AOIW9–C35	
Date	05/09/05
Depth (ft bgs)	2 – 2.3
Total PCBs	240*

AOIW9–V003	
Date	03/02/05
Depth (ft bgs)	2 – 2.5
Total PCBs	26*

SAMPLES ARE FROM AREA OF INTEREST (AOI) W-9 BUT EXACT LOCATIONS COULD NOT BE IDENTIFIED

SW9–09	
Date	06/27/01
Depth (ft bgs)	0 – 2
Total PCBs	26*

BW9–27			
Date	04/29/05	04/29/05	04/29/05
Depth (ft bgs)	4 – 6	6 – 8	8 – 10
Total PCBs	30*	72*	16*

BW9–27–NB(3–5')	
Date	05/19/05
Depth (ft bgs)	3 – 5
Total PCBs	16.5*

BW9–27–E(9–14')	
Date	05/18/05
Depth (ft bgs)	9 – 14
Total PCBs	35*

SB–92–17	
Date	10/31/17
Depth (ft bgs)	16 – 18
Total PCBs	140*

SB–90–17				
Date	10/31/17	10/31/17	10/31/17	10/31/17
Depth (ft bgs)	16 – 18	18 – 20	20 – 22	24 – 26
Total PCBs	106*	196*	27*	34* [4]

SB–54–14			
Date	07/30/14	07/30/14	
Depth (ft bgs)	14 – 16	18 – 20	
Total PCBs	27*	140* [110*]	

SB–60–14					
Date	08/18/14	08/18/14	08/18/14	08/18/14	08/18/14
Depth (ft bgs)	8 – 9	14 – 15	18 – 19	22 – 23	26 – 27
Total PCBs	67.1 J*	46.2 J*	32.8 J*	26.1 J*	25.2 J*

SB–53–14	
Date	07/30/14
Depth (ft bgs)	22 – 24
Total PCBs	53*

BW1–10		
Date	01/11/02	01/11/02
Depth (ft bgs)	8 – 10	12 – 14
Total PCBs	59.8*	23.5 J*

BW1–01	
Date	07/16/01
Depth (ft bgs)	8 – 10
Total PCBs	35*

SB–41–14		
Date	06/24/14	06/24/14
Depth (ft bgs)	14 – 16	16 – 18
Total PCBs	78* [95*]	75*

SB–49–14	
Date	07/29/14
Depth (ft bgs)	18 – 20
Total PCBs	47*

SB–99–17		
Date	11/01/17	11/01/17
Depth (ft bgs)	8 – 10	14 – 16
Total PCBs	36*	30*

SB–51–14	
Date	07/29/14
Depth (ft bgs)	8 – 10
Total PCBs	120*

SB–116–18				
Date	06/21/18	06/21/18	06/21/18	06/21/18
Depth (ft bgs)	4 – 6	6 – 8	12 – 14	14 – 15
Total PCBs	37*	19*	79*	34*

SB–111–18		
Date	03/21/18	03/21/18
Depth (ft bgs)	6 – 8	8 – 10
Total PCBs	24* [25*]	63*

SB–52–14		
Date	07/29/14	07/29/14
Depth (ft bgs)	8 – 10	10 – 12
Total PCBs	110*	29*

BW1–15	
Date	03/17/05
Depth (ft bgs)	8 – 10
Total PCBs	290*

SB–32–14				
Date	06/16/14	06/16/14	06/16/14	06/16/14
Depth (ft bgs)	6 – 8	8 – 10	12 – 14	22 – 24
Total PCBs	100*	110*	37*	0.041 [22*]

SB–31–14				
Date	06/16/14	06/16/14	06/16/14	06/16/14
Depth (ft bgs)	6 – 8	12 – 14	16 – 18	22 – 24
Total PCBs	140*	240*	450*	140*

SBMW20	
Date	12/20/95
Depth (ft bgs)	23 – 25
Total PCBs	38* [43*]

SB–14–14					
Date	06/09/14	06/09/14	06/09/14	06/09/14	06/09/14
Depth (ft bgs)	9 – 10	11 – 12	13 – 14	15 – 16	23 – 24
Total PCBs	300*	47*	100*	150*	41*

SB–95–17				
Date	11/01/17	11/01/17	11/01/17	11/01/17
Depth (ft bgs)	8 – 10	10 – 12	12 – 14	14 – 16
Total PCBs	56*	137*	27*	67* [9]

SB–110–18	
Date	03/21/18
Depth (ft bgs)	14 – 16
Total PCBs	16* [16*]

SB–43–14	
Date	06/24/14
Depth (ft bgs)	28 – 30
Total PCBs	29.4 J*

BCC–53	
Date	06/03/04
Depth (ft bgs)	6 – 8
Total PCBs	16*

BW9–01–W1	
Date	07/22/04
Depth (ft bgs)	7 – 9
Total PCBs	21*

BW9–01–S1E3	
Date	08/03/04
Depth (ft bgs)	8 – 10
Total PCBs	19*

BW9–01–S2E3	
Date	08/30/04
Depth (ft bgs)	0.6 – 1.2
Total PCBs	24*

BW9–01–S1E2	
Date	08/09/04
Depth (ft bgs)	10 – 11
Total PCBs	330*

BW9–01–E3S7.5	
Date	12/21/04
Depth (ft bgs)	0.75 – 2
Total PCBs	37*

BCC–60–8	
Date	08/09/04
Depth (ft bgs)	1.1 – 2.1
Total PCBs	180*

BCC–60	
Date	06/01/04
Depth (ft bgs)	1.8 – 2.8
Total PCBs	17*

BCC–60–1	
Date	07/26/04
Depth (ft bgs)	2 – 4
Total PCBs	27*

BW9–02–S1	
Date	12/17/01
Depth (ft bgs)	0.8 – 2
Total PCBs	19*

BW9–02	
Date	07/17/01
Depth (ft bgs)	0.9 – 2
Total PCBs	44*

BW9–02–W2	
Date	01/30/02
Depth (ft bgs)	0.8 – 2
Total PCBs	28*

BW9–02–E1S2	
Date	01/02/02
Depth (ft bgs)	0.5 – 2
Total PCBs	180*

BW9–02–E11S1	
Date	02/19/02
Depth (ft bgs)	0 – 2
Total PCBs	360*

BW9–02–E11S3	
Date	02/19/02
Depth (ft bgs)	0 – 2
Total PCBs	340*

BW9–02–E10S4	
Date	02/20/02
Depth (ft bgs)	0.5 – 2
Total PCBs	16*

BW9–02–W1S3	
Date	01/02/02
Depth (ft bgs)	0.5 – 2
Total PCBs	180*

BW9–02–W2N1	
Date	01/04/02
Depth (ft bgs)	0 – 2
Total PCBs	21*

BW9–02–W2S1	
Date	01/04/02
Depth (ft bgs)	0.5 – 2
Total PCBs	150*

BW9–02–W2S2	
Date	01/04/02
Depth (ft bgs)	0.5 – 2
Total PCBs	41*

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING/SOIL SAMPLE LOCATION
- SURVEYED CONCRETE AND/OR SOIL SAMPLE LOCATION
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA
- 4,700 — EXCEEDS SITE SPECIFIC BACKGROUND CONCENTRATIONS
- 199 — EXCEEDS MDEQ 2013 STATE DEFAULT BACKGROUND LEVELS
- * — EXCEEDS MDEQ 2013 NONRESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA
- EXCEEDS MDEQ 2013 SOIL SATURATION CONCENTRATION SCREENING LEVEL
- *1,520* — EXCEEDS MDEQ 2013 NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- **2.3** — EXCEEDS MDEQ 2013 SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. E – EXCEEDS CALIBRATION STANDARD.
8. R – REJECTED DATA.
9. PCB – POLYCHLORINATED BIPHENYL.
10. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
    - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
    - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
    - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
    - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
    - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
    - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

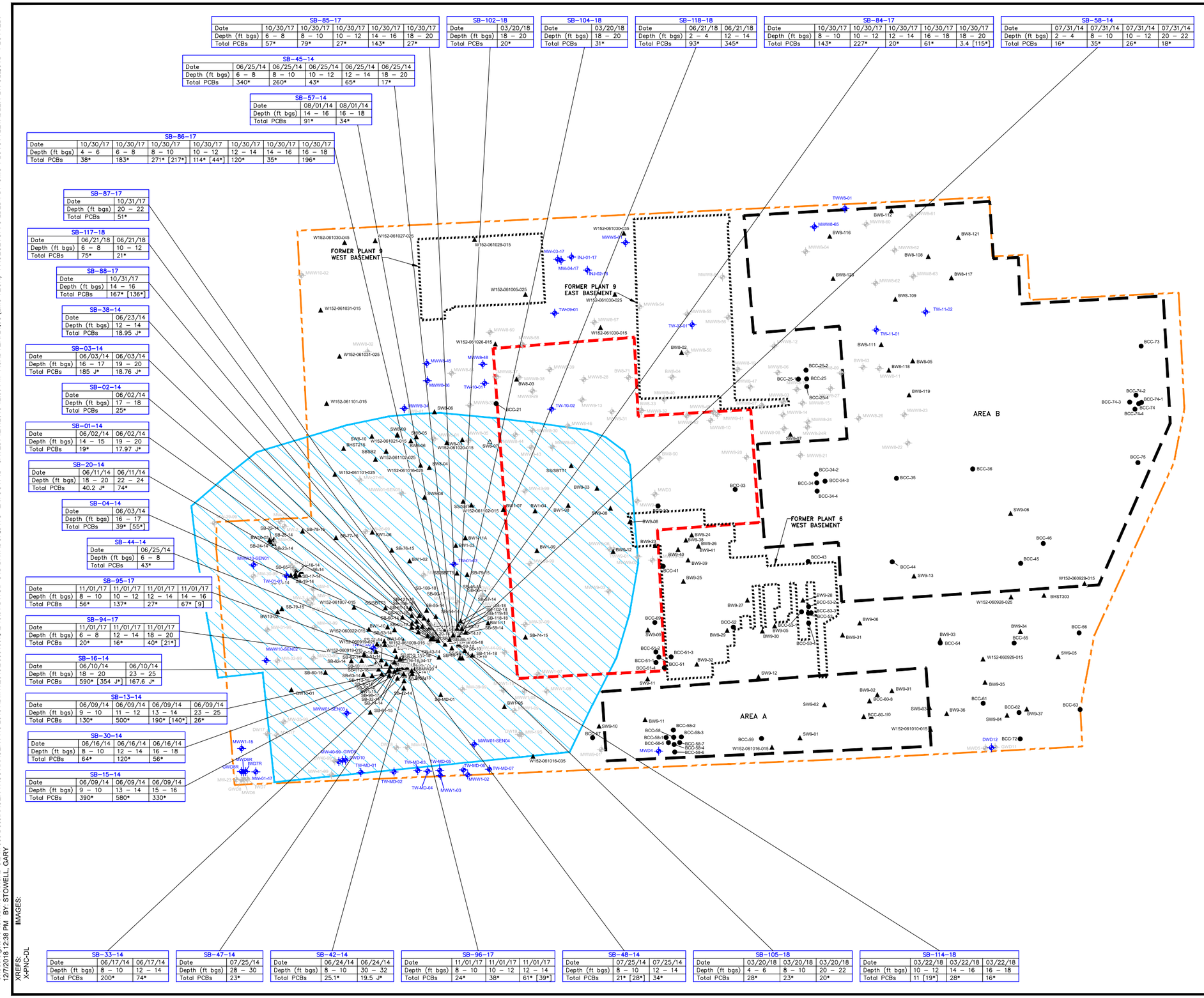
DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY PCB EXCEEDANCES IN SOIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1A



NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. E – EXCEEDS CALIBRATION STANDARD.
8. R – REJECTED DATA.
9. PCB – POLYCHLORINATED BIPHENYL.
10. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
    - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
    - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
    - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
    - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
    - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
    - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

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PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
PCB EXCEEDANCES IN SOIL

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FIGURE
1B

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Regq) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\IBM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD.18\01-DWG\FIG1B-DATABOX.DWG LAYOUT: 1B SAVED: 12/7/2018 12:00 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C:\LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED:
12/7/2018 12:38 PM BY: STOWELL, GARY
XREFS:
IMAGES:
X-PNC-DL

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Req) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\IBM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD\18\01-DWG\FIG1C-DATABOX.DWG LAYOUT: 1C SAVED: 12/7/2018 12:04 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB
PLOTTED: 12/7/2018 12:38 PM BY: STOWELL, GARY
XREFS:
X-PNC-DL
IMAGES:

MWW8–02	
Date	08/29/01
Depth (ft bgs)	0.5 – 2
Phenanthrene	7.7 J

SBTT2	
Date	01/22/96
Depth (ft bgs)	15
2–Methylnaphthalene	7.2 J
Phenanthrene	4.9 J
Naphthalene	3.7 J

BW8–06	
Date	07/28/03
Depth (ft bgs)	2 – 4
Fluoranthene	6.9 J
Phenanthrene	3.6 J

SSTT2	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
2–Methylnaphthalene	23
Acenaphthene	36
Benzo(a)pyrene	8.6 J*
Carbazole	11
Dibenzofuran	27
Fluoranthene	82
Fluorene	36
Phenanthrene	110
Naphthalene	97

BW1–11A		
Date	07/30/03	07/30/03
Depth (ft bgs)	0 – 2	6 – 8
Benzene	0.25	0.062 J
1,2–Dichlorobenzene	ND	0.45
Ethylbenzene	0.11 J	0.64
Total Xylenes	0.49 J	3
2–Methylnaphthalene	2.7	29 J
Phenanthrene	0.8 J	10 J
Naphthalene	1.5 J	4.6 J

BW1–03		
Date	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	4 – 6
Dichloromethane	ND	0.13 J
Trichloroethene	ND	0.17 J
Total Xylenes	ND	1.5
2–Methylnaphthalene	1.7	7 J
Phenanthrene	0.64 J	8.8
Naphthalene	3.1	2.9 J

SBTT5	
Date	01/23/96
Depth (ft bgs)	3 – 5
Naphthalene	1.4

BW1–02		
Date	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	8 – 10
Total Xylenes	0.036	1
Di–n–Butylphthalate	16	ND
Phenanthrene	2.5 J	0.94 J

SSTT5	
Date	01/23/96
Depth (ft bgs)	0 – 0.5
Phenanthrene	3.7 J [0.5]
Naphthalene	ND [1.5]

BW10–02	
Date	07/30/01
Depth (ft bgs)	12 – 14
Dichloromethane	0.28 J [ND]
Phenanthrene	2.6 J [3.6 J]

W152–061007–015	
Date	10/07/06
Depth (ft bgs)	Unknown
Dichloromethane	110

SBTT3	
Date	01/23/96
Depth (ft bgs)	5 – 9
Dichloromethane	25
Ethylbenzene	15
Toluene	42
Total Xylenes	75
2,4–Dimethylphenol	72 J
2–Methylnaphthalene	34 J
Acenaphthene	14 J
Butylbenzylphthalate	1,100
Dibenzofuran	13 J
Fluoranthene	22 J
Fluorene	26 J
Phenanthrene	52 J
Phenol	140
Naphthalene	70 J

BW1–10		
Date	01/11/02	01/11/02
Depth (ft bgs)	8 – 10	12 – 14
Dichloromethane	ND	1.1 J
Ethylbenzene	3.5	8.9
Trichloroethene	0.049 J	0.25 J
Total Xylenes	7.4 J	39 J
2–Methylnaphthalene	85	150
Butylbenzylphthalate	170	57
Fluoranthene	ND	6.1 J
Fluorene	ND	8.9 J
Phenanthrene	13 J	23
Naphthalene	12 J	18

W152–061102–015		
Date	11/02/06	
Depth (ft bgs)	Unknown	
Dichloromethane	200	

BW8–03		
Date	07/28/03	07/28/03
Depth (ft bgs)	0.5 – 2	3 – 5
Phenanthrene	14	5 J

MWW8–29	
Date	11/11/04
Depth (ft bgs)	11 – 13
2–Methylnaphthalene	9.9
Fluorene	14
Phenanthrene	27
Naphthalene	1.9 J

SSTT1	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
2–Methylnaphthalene	5.5
Naphthalene	2.9

MWW8–12		
Date	02/06/02	02/06/02
Depth (ft bgs)	1 – 3	8 – 10
Phenanthrene	3.5	3.4 [3.2]

MWW8–03		
Date	09/04/01	09/04/01
Depth (ft bgs)	2 – 4	8 – 10
2–Methylnaphthalene	ND	6.7 J
Fluorene	19	21
Phenanthrene	18	42

BCC–25		
Date	06/02/04	
Depth (ft bgs)	0.9 – 2	
Fluoranthene	11 J	
Fluorene	12 J	
Phenanthrene	20 J	

BW8–108	
Date	08/02/05
Depth (ft bgs)	0 – 2
2–Methylnaphthalene	8.4
Naphthalene	2.5 J

MWW8–11		
Date	02/04/02	02/04/02
Depth (ft bgs)	0.8 – 2	8 – 10
Fluorene	NA	7.3
Phenanthrene	4.7	9.9

TP–W1–01	
Date	09/06/01
Depth (ft bgs)	7
Tetrachloroethene	4
Trichloroethene	**2.3**

TP–W1–02	
Date	09/06/01
Depth (ft bgs)	9
Tetrachloroethene	3.8

TP–W1–03	
Date	09/06/01
Depth (ft bgs)	10
Tetrachloroethene	5.6

W152–061103–025	
Date	11/03/06
Depth (ft bgs)	Unknown
Dichloromethane	140

W152–061104–015	
Date	11/03/06
Depth (ft bgs)	Unknown
Dichloromethane	110

SBSB5		
Date	12/12/95	
Depth (ft bgs)	4 – 6	
Benzene	0.72 J	
Ethylbenzene	25	
Toluene	34	
Total Xylenes	150	
2–Methylnaphthalene	55	
Di–n–Butylphthalate	480	
Phenanthrene	11 J	
Naphthalene	19 J	

SBDW21		
Date	12/19/95	
Depth (ft bgs)	18 – 20	
Phenanthrene	3.1	

W152–061106–015	
Date	11/05/06
Depth (ft bgs)	Unknown
Dichloromethane	160

W152–061108–025	
Date	11/05/06
Depth (ft bgs)	Unknown
Dichloromethane	100

EXACT LOCATIONS WITHIN THE USPS PROPERTY COULD NOT BE VERIFIED

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING/SOIL SAMPLE LOCATION
- SURVEYED CONCRETE AND/OR SOIL SAMPLE LOCATION
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA
- 4,700 — EXCEEDS SITE SPECIFIC BACKGROUND CONCENTRATIONS
- 199 — EXCEEDS MDEQ 2013 STATE DEFAULT BACKGROUND LEVELS
- * — EXCEEDS MDEQ 2013 NONRESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA
- EXCEEDS MDEQ 2013 SOIL SATURATION CONCENTRATION SCREENING LEVEL
- *1,520* — EXCEEDS MDEQ 2013 NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- **2.3** — EXCEEDS MDEQ 2013 SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. E – EXCEEDS CALIBRATION STANDARD.
8. R – REJECTED DATA.
9. VOCS – VOLATILE ORGANIC COMPOUNDS
10. SVOCS – SEMI–VOLATILE ORGANIC COMPOUNDS
11. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
    - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
    - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
    - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
    - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
    - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
    - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

DRAFT

W152–061009–015	
Date	10/9/006
Depth (ft bgs)	Unknown
Dichloromethane	100

BW1–01	
Date	07/16/01
Depth (ft bgs)	8 – 10
Benzene	0.39
Ethylbenzene	2.5
Total Xylenes	13
2–Methylnaphthalene	33
Dibenzofuran	2.9 J
Fluoranthene	24
Fluorene	5.5 J
Phenanthrene	33
Naphthalene	8.4 J

SBMW20	
Date	12/20/95
Depth (ft bgs)	23 – 25
Ethylbenzene	6.1 [5.4]
Total Xylenes	20 [17]
2–Methylnaphthalene	85 [120]
Dibenzofuran	ND [4.2]
Fluoranthene	15 J [21]
Fluorene	7.5 J [9.2]
Phenanthrene	21 J [26]
Naphthalene	12 J [19]

SSTT4	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
Fluorene	9.9
Phenanthrene	11

SBTT4	
Date	01/23/96
Depth (ft bgs)	3 – 10
Phenanthrene	3.1 J

MW–36–99	
Date	09/02/99
Depth (ft bgs)	17 – 18
Ethylbenzene	1.7
Tetrachloroethene	0.12
Total Xylenes	7.6

SBMW22	
Date	12/12/95
Depth (ft bgs)	16 – 18
Total Xylenes	2.4
2–Methylnaphthalene	19 J
Fluoranthene	19 J
Fluorene	5.4 J
Phenanthrene	25 J
Naphthalene	7.1 J

BW1–04	
Date	07/16/01
Depth (ft bgs)	0 – 2
Benzene	0.39
Dichloromethane	0.13 J
2–Methylnaphthalene	9
Phenanthrene	2.7
Naphthalene	4.9

SW9–01		
Date	06/27/01	
Depth (ft bgs)	0 – 2	
Dichloromethane	0.13 J	

SW9–02		
Date	06/27/01	
Depth (ft bgs)	0 – 2	
Phenanthrene	2.3	

BW9–24	
Date	04/19/05
Depth (ft bgs)	8 – 10
Benzene	0.2 J
1,2–Dibromo–3–chloropropane	0.11 J
Dichloromethane	0.16 J
Total Xylenes	1.4 J
Naphthalene	1.3 J

SW9–07	
Date	06/27/01
Depth (ft bgs)	0 – 2
Carbazole	1.2 J
Fluoranthene	13
Phenanthrene	9

MWW8–10	
Date	01/29/02
Depth (ft bgs)	2 – 4
Phenanthrene	8.3

W152–060929–015	
Date	09/29/06
Depth (ft bgs)	Unknown
Dichloromethane	100

BW9–33	
Date	04/18/05
Depth (ft bgs)	0 – 2
Trichloroethene	0.19

BW9–01	
Date	07/16/01
Depth (ft bgs)	8 – 10
Benzo(a)pyrene	8.5*
Carbazole	1.4 J
Fluoranthene	28
Phenanthrene	16
Naphthalene	0.79 J

W152–061010–015	
Date	10/10/06
Depth (ft bgs)	Unknown
Dichloromethane	110

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
VOC AND SVOC EXCEEDANCES IN SOIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1C

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Req'd) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD18\01-DWG\FIG1D-DATABOX.DWG LAYOUT: 1D
PLOTTED: 12/7/2018 12:39 PM BY: STOWELL, GARY SAVED: 12/7/2018 12:02 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB
IMAGES:
XREFS:
X-PNC-DL

W152-061030-045	
Date	10/30/06
Depth (ft bgs)	Unknown
Chromium	10
Manganese	240

W152-061027-025	
Date	10/27/06
Depth (ft bgs)	Unknown
Chromium	8.5
Manganese	220

W152-061026-015	
Date	10/26/06
Depth (ft bgs)	Unknown
Chromium	8.3
Manganese	200
Selenium	0.48

W152-061030-035	
Date	10/30/06
Depth (ft bgs)	Unknown
Chromium	9.6
Manganese	210

W152-061030-025	
Date	10/30/06
Depth (ft bgs)	Unknown
Chromium	9.6
Manganese	240
Silver	0.17

W152-061030-015	
Date	10/30/06
Depth (ft bgs)	Unknown
Chromium	9.3
Manganese	230
Silver	0.25

W152-061031-015	
Date	10/31/06
Depth (ft bgs)	Unknown
Chromium	9.1
Manganese	210
Zinc	48

W152-061031-025	
Date	10/31/06
Depth (ft bgs)	Unknown
Chromium	9.9
Manganese	240

W152-061101-015	
Date	11/01/06
Depth (ft bgs)	Unknown
Chromium	8.1
Manganese	190

W152-061021-015	
Date	10/21/06
Depth (ft bgs)	Unknown
Chromium	9.7
Manganese	230
Silver	0.12

W152-061102-025	
Date	11/02/06
Depth (ft bgs)	Unknown
Chromium	9.6
Manganese	290

W152-061101-025	
Date	11/01/06
Depth (ft bgs)	Unknown
Arsenic	5.3
Chromium	12
Manganese	350
Mercury	0.066
Zinc	52

W152-061020-015	
Date	10/20/06
Depth (ft bgs)	Unknown
Chromium	12
Manganese	250
Selenium	0.4

W152-061016-025	
Date	10/16/06
Depth (ft bgs)	Unknown
Chromium	8.7
Manganese	300

W152-061102-015	
Date	11/02/06
Depth (ft bgs)	Unknown
Chromium	11
Manganese	270

W152-061007-015	
Date	10/07/06
Depth (ft bgs)	Unknown
Chromium	6.8
Manganese	310
Silver	0.17

W152-060922-015	
Date	09/22/06
Depth (ft bgs)	Unknown
Chromium	8.9
Manganese	250
Mercury	0.13

W152-060919-025	
Date	09/19/06
Depth (ft bgs)	Unknown
Chromium	10
Manganese	220
Silver	0.21

W152-060919-015	
Date	09/19/06
Depth (ft bgs)	Unknown
Arsenic	4.7
Chromium	11
Manganese	250
Silver	0.12

W152-061009-015	
Date	10/09/06
Depth (ft bgs)	Unknown
Chromium	7.6
Manganese	230
Silver	0.110

W152-061016-035	
Date	10/16/06
Depth (ft bgs)	Unknown
Chromium	9.2
Manganese	200

W152-061016-015	
Date	10/16/06
Depth (ft bgs)	Unknown
Chromium	8.1
Manganese	290

W152-060928-025	
Date	09/28/06
Depth (ft bgs)	Unknown
Chromium	10
Manganese	320
Selenium	0.45
Silver	0.35

W152-061010-015	
Date	10/10/06
Depth (ft bgs)	Unknown
Chromium	4.7
Manganese	87

W152-060929-015	
Date	09/29/06
Depth (ft bgs)	Unknown
Chromium	8
Manganese	270
Silver	0.29
Zinc	54

W152-060928-015	
Date	09/28/06
Depth (ft bgs)	Unknown
Chromium	10
Manganese	260
Silver	0.36

W152-061103-025	
Date	11/03/06
Depth (ft bgs)	Unknown
Arsenic	7.3
Chromium	17
Manganese	450
Silver	0.11
Zinc	54

W152-061106-025	
Date	11/06/06
Depth (ft bgs)	Unknown
Arsenic	6.5
Chromium	16
Manganese	400
Zinc	54

W152-061027-015	
Date	10/27/06
Depth (ft bgs)	Unknown
Arsenic	5.3
Chromium	11
Manganese	310

W152-060921-015	
Date	09/21/06
Depth (ft bgs)	Unknown
Chromium	7.8
Manganese	300

W152-061104-015	
Date	11/04/06
Depth (ft bgs)	Unknown
Chromium	12
Manganese	280

W152-061104-025	
Date	11/04/06
Depth (ft bgs)	Unknown
Arsenic	5.3
Chromium	11
Manganese	280

W152-061014-015	
Date	10/14/06
Depth (ft bgs)	Unknown
Chromium	7.6
Manganese	290

W152-061026-025	
Date	10/26/06
Depth (ft bgs)	Unknown
Chromium	7.6
Manganese	200
Selenium	0.49

W152-061106-015	
Date	11/06/06
Depth (ft bgs)	Unknown
Arsenic	5.2
Chromium	12
Manganese	300

W152-061014-025	
Date	10/14/06
Depth (ft bgs)	Unknown
Chromium	8.1
Manganese	190

W152-061103-015	
Date	11/03/06
Depth (ft bgs)	Unknown
Chromium	11
Manganese	340

W152-061104-035	
Date	11/04/06
Depth (ft bgs)	Unknown
Chromium	8.6
Manganese	250

EXACT LOCATIONS WITHIN THE USPS PROPERTY COULD NOT BE VERIFIED

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING/SOIL SAMPLE LOCATION
- SURVEYED CONCRETE AND/OR SOIL SAMPLE LOCATION
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA
- 4,700 — EXCEEDS SITE SPECIFIC BACKGROUND CONCENTRATIONS
- 199 — EXCEEDS MDEQ 2013 STATE DEFAULT BACKGROUND LEVELS
- * — EXCEEDS MDEQ 2013 NONRESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA
- EXCEEDS MDEQ 2013 SOIL SATURATION CONCENTRATION SCREENING LEVEL
- 1,520 — EXCEEDS MDEQ 2013 NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- 2.3 — EXCEEDS MDEQ 2013 SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg).
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4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. E – EXCEEDS CALIBRATION STANDARD.
8. R – REJECTED DATA.
9. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
   - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
   - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
   - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
   - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
   - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
INORGANICS EXCEEDANCES IN SOIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1D

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Req'd) LYR:(On)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD18\01-DWG\FIG1E-DATABOX.DWG LAYOUT: 1E SAVED: 12/7/2018 11:51 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED:
12/7/2018 12:40 PM BY: STOWELL, GARY
XREFS:
IMAGES:
X-PNC-DL

SSTT3	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
Aluminum	1,790 J [3,270 J]
Chromium	4.48 J [11.7 J]
Cobalt	5.11 [4.07]
Cyanide (total)	ND [0.39]
Iron	10,500 [7,800]
Magnesium	8,160 J [12,000 J]
Manganese	543 J [270 J]

SBTT3		
Date	01/23/96	
Depth (ft bgs)	5 – 9	
Aluminum	6,200	
Arsenic	7.12	
Barium	306	
Cadmium	10.7	
Chromium	161	
Cobalt	11.3	
Copper	2,370	
Cyanide (total)	3.6	
Iron	69,400	
Lead	180	
Manganese	*1,920*	
Mercury	0.156	
Nickel	195	
Selenium	0.836	
Silver	0.886	
Zinc	602	

BW1–02		
Date	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	8 – 10
Arsenic	8.98	5.99
Barium	296	161
Cadmium	3.37 J	0.961
Chromium	180	37.8
Cobalt	9.14	5.6
Copper	189	45.6
Cyanide (total)	2.81	0.955
Lead	109	55.1
Manganese	*6,330*	471
Mercury	0.3	0.382
Nickel	93.9	35.8
Thallium	7.72 J	ND
Zinc	191	58.1

BW1–01		
Date	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	8 – 10
Antimony	ND	35
Arsenic	4	19.1
Barium	25.1	3,830
Cadmium	0.378 J	15.6
Chromium	9.71 J	*1,520*
Cobalt	4.41 J	37.8
Copper	13.6	4,700
Cyanide (total)	ND	1.53
Lead	7.22	3,950*
Manganese	273	1,070
Mercury	ND	0.549
Nickel	10.6 J	349
Selenium	ND	1.34 J
Silver	ND	69.6
Vanadium	13.1	32.3
Zinc	46 J	1,660

SSTT5	
Date	01/23/96
Depth (ft bgs)	0 – 0.5
Aluminum	799 J [3,960 J]
Antimony	16.6 J [2.94 J]
Arsenic	67.1 J* [3.35 J]
Barium	41.6 J [83.2 J]
Chromium	940 J [163 J]
Cobalt	69.5 J [4.82 J]
Copper	987 J [82.7 J]
Cyanide (total)	0.37 [0.52]
Iron	70,000 J [52,300 J]
Lead	18.8 J [51.5 J]
Manganese	*4,600 J [1,530 J]*
Nickel	557 J [44.7 J]
Silver	0.447 [ND]
Vanadium	52.7 J [7.4 J]
Zinc	66 J [1,370 J]

SBTT5	
Date	01/23/96
Depth (ft bgs)	3 – 5
Aluminum	3,950
Barium	78.4
Chromium	143
Cobalt	6.17
Copper	93.8
Cyanide (total)	0.93
Iron	68,800
Lead	202
Manganese	*1,290*
Nickel	33.5
Zinc	1,120

SBMW22	
Date	12/12/95
Depth (ft bgs)	16 – 18
Aluminum	8,220
Antimony	150
Arsenic	20
Barium	5,720
Cadmium	3.51
Chromium	207
Cobalt	29.2
Copper	1,110
Cyanide (total)	3.1
Iron	120,000
Lead	1,350*
Manganese	*3,900*
Mercury	1.56
Nickel	351
Selenium	1.94
Silver	2.37
Vanadium	37.1
Zinc	4,040

SBDW22	
Date	12/19/95
Depth (ft bgs)	32 – 34
Aluminum	2,000
Chromium	7.99
Cobalt	4.62
Iron	7,500
Magnesium	15,100
Manganese	216

BW1–10					
Date	01/11/02	01/11/02	01/11/02	01/11/02	01/11/02
Depth (ft bgs)	1.3 – 2	2 – 4	4 – 6	8 – 10	12 – 14
Arsenic	3.24	4.64	3.87	5.71	8.65
Barium	6.49 J	6.33 J	8.39 J	61.4 J	175 J
Cadmium	0.129 J	0.164 J	0.217 J	0.933 J	2.03 J
Chromium	5.23	5.72	5.79	52.8	107
Cobalt	1.95	2.89	3.38	10.8	9.13
Copper	20	6.85	12.3	98.7	315
Cyanide (total)	ND	0.256 J	ND	0.913	1.97
Lead	3.67	3.52	5.06	46.3	104
Manganese	145	177	235	498	721
Mercury	ND	ND	0.0154 J	0.146	0.29
Nickel	5.12	7.03	8.59	35.6	90.8
Selenium	ND	ND	ND	1.26 J	1.07 J
Sliver	ND	ND	ND	0.275 J	0.748
Zinc	21.3	28.9	36.9	186	647

BW10–03			
Date	07/30/01	07/30/01	07/30/01
Depth (ft bgs)	0 – 2	8 – 10	12 – 14
Barium	84.9	28.7	41
Chromium	37.1	9.37	14.1
Cobalt	4.65	4.6	6.93
Copper	45.1	11.4	16.5
Lead	50.2	8.59	26.3
Manganese	659	300	308
Mercury	0.091	0.0134 J	0.0185 J
Nickel	23.5	12.6	19
Selenium	0.433 J	ND	ND
Zinc	64.1	31.1	42.4

BW10–02			
Date	07/30/01	07/30/01	07/30/01
Depth (ft bgs)	0 – 2	8 – 10	12 – 14
Chromium	124	22	18 [16.4]
Cobalt	2.62	2.09	1.35 [1.39]
Copper	45.2	16.3	12.9 [12.7]
Lead	27.8	8.72	26.5 [41.8]
Manganese	1,330	534	776 [652]
Nickel	21.1	18.2	8.53 [10.9]
Selenium	0.732	0.401 J	ND [ND]

BW10–01			
Date	07/30/01	07/30/01	07/30/01
Depth (ft bgs)	0 – 2	8 – 10	12 – 14
Arsenic	2.82	3.75	8.05
Barium	86.2	15.8	19.2
Chromium	32.9	44.1	94.4
Cobalt	2.19	3.41	5.66
Copper	21.6	48.8	112
Lead	18.3	22.2	28.9
Manganese	*1,720*	402	864
Nickel	14.6	33.9	77.5
Selenium	0.382 J	0.729	0.499 J

SBMW17		
Date	12/20/95	12/14/95
Depth (ft bgs)	6 – 8	10 – 12
Aluminum	1,600	625
Barium	16.4	156
Chromium	30.5	1.69
Copper	55.8	2.79
Cyanide (total)	0.62	ND
Iron	16,300	2,060
Magnesium	814	9,630
Manganese	248	425
Nickel	33.8	3.06

GWD8		
Date	06/13/01	06/13/01
Depth (ft bgs)	0.8 – 2	4 – 6
Barium	10.2	94.6
Chromium	15.8	50.4
Cobalt	3.76	2.47
Copper	15.1	38.5
Manganese	305	1,350
Nickel	14.4	26.7

SBDW20	
Date	12/19/95
Depth (ft bgs)	40 – 42
Aluminum	1,210 [1,200]
Iron	2,950 [2,820]
Manganese	93.5 [95.1]

SBMW20	
Date	12/20/95
Depth (ft bgs)	23 – 25
Aluminum	1,850 [2,250]
Barium	187 [267]
Chromium	17.2 [14.2]
Copper	143 [126]
Cyanide (total)	1.9 [3.5]
Iron	10,600 [8,430]
Lead	112 [89.8]
Manganese	252 [170]
Mercury	0.647 [1.39]
Nickel	60.5 [47.8]
Zinc	68.4 [73.2]

SBDW18	
Date	12/20/95
Depth (ft bgs)	34 – 36
Aluminum	1,700 [1,340]
Chromium	3.81 [4.83]
Cyanide (total)	1.9 [ND]
Iron	3,620 [3,020]
Magnesium	10,100 [9,220]
Manganese	124 [110]

SBMW18	
Date	12/14/95
Depth (ft bgs)	16 – 18
Aluminum	2,670
Chromium	21.4
Iron	9,980
Lead	113
Manganese	227
Nickel	33.2

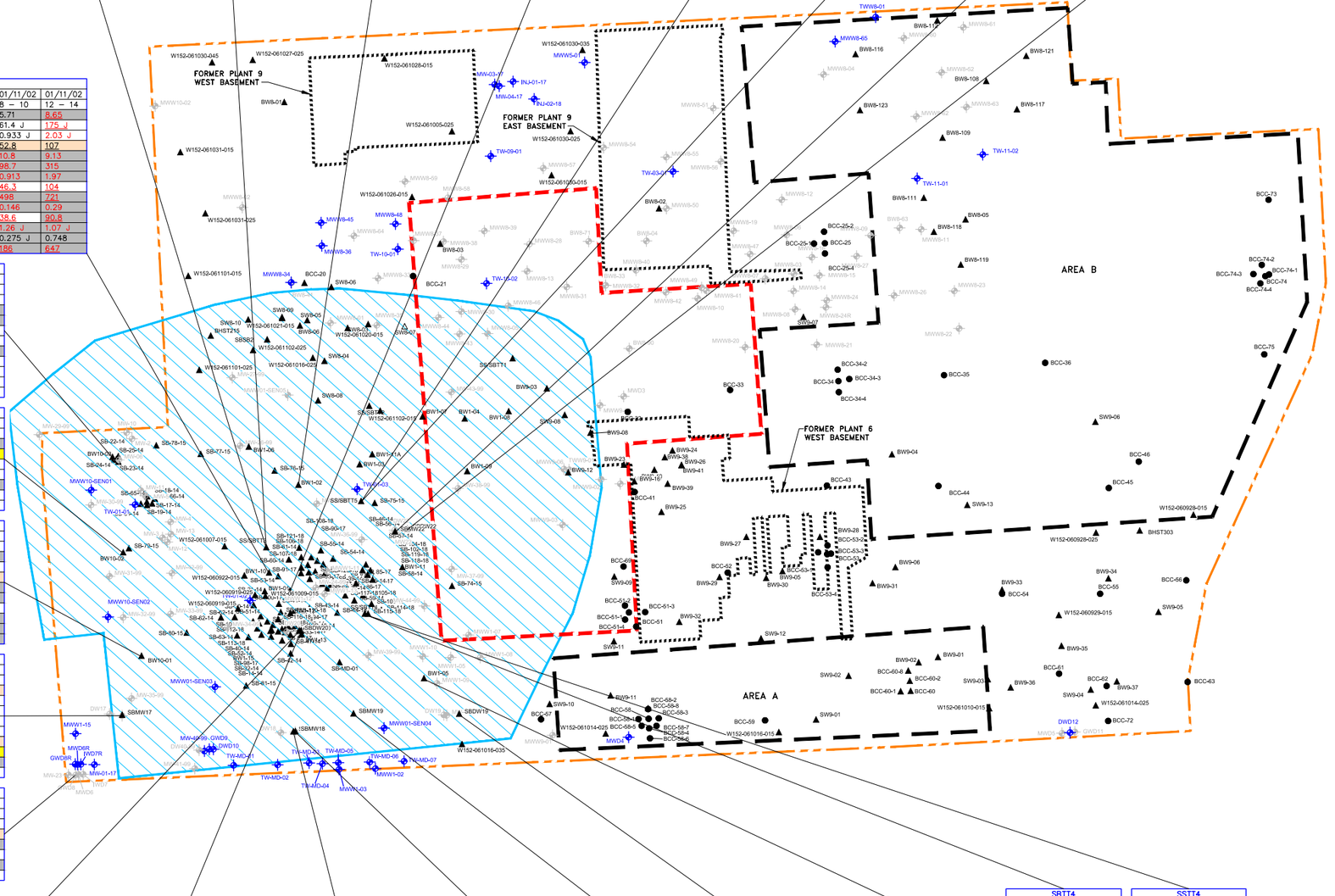
SBMW19	
Date	12/18/95
Depth (ft bgs)	25 – 27
Aluminum	1,660
Chromium	4.38
Iron	4,050
Lead	70.2
Manganese	32.4

SBDW19	
Date	12/15/95
Depth (ft bgs)	36 – 38
Aluminum	1,790
Arsenic	5.3
Chromium	3.55
Iron	10,800
Magnesium	10,700
Manganese	340

BW1–05			
Date	01/09/02	01/09/02	01/09/02
Depth (ft bgs)	0 – 2	8 – 10	25 – 27
Chromium	*272*	13.7	144
Manganese	*1,900*	334	877

SBTT4	
Date	01/23/96
Depth (ft bgs)	3 – 10
Aluminum	2,750
Antimony	5.44
Arsenic	9.46
Chromium	*340*
Cobalt	14
Copper	350
Cyanide (total)	0.38
Iron	14,200
Lead	48.3
Manganese	*1,690*
Nickel	145
Zinc	69.9

SSTT4	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
Aluminum	438
Antimony	22.5
Arsenic	44.3*
Chromium	*1,660*
Cobalt	64.4
Copper	1,590
Iron	64,800
Manganese	*4,490*
Nickel	601
Silver	0.382
Vanadium	46.4
Zinc	99.8


FORMER PLANT 9 WEST BASEMENT
FORMER PLANT 9 EAST BASEMENT
FORMER PLANT 6 WEST BASEMENT
AREA A
AREA B
TWW8-01
MWW8-65
BW8-116
BW8-121
BW8-108
BW8-123
BW8-117
BW8-109
TW-11-02
TW-11-01
BW8-111
BW8-05
BW8-118
BW8-119
BW8-02
TW-09-01
TW-03-17
INJ-01-17
INJ-02-18
MW-03-17
MW-04-17
MWW8-45
MWW8-48
MWW8-36
TW-10-01
TW-10-02
MWW8-34
BCC-20
BCC-21
SW8-06
SW8-10
SW8-09
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SW8-08
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BW1-37
BW1-38
BW1-39
BW1-40

BCC-51		
Date	06/03/04	06/03/04
Depth (bgs)	0.7 – 2	6 – 8
Arsenic	8.15 J	4.92 J
Barium	359 J	9.15 J
Cadmium	2.51 J	0.291 J
Chromium	131 J	4.65 J
Cobalt	12.1 J	2.62 J
Copper	161 J	8.79 J
Lead	88.7 J	5.11 J
Manganese	4,510 J	200 J
Mercury	0.188	ND
Nickel	157 J	7.39 J
Silver	0.313 J	ND
Zinc	155 J	41.6 J

SW9-09	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	6.96
Barium	118
Cadmium	2.14
Chromium	68.9
Cobalt	6.6
Copper	48
Lead	67.7
Manganese	1,140
Mercury	0.103
Nickel	21.2
Zinc	315 J

BCC-51-2			
Date	08/06/04	08/06/04	08/06/04
Depth (bgs)	0 – 2	7 – 8	8 – 10
Manganese	684	210	122

BCC-51-3		
Date	08/06/04	08/06/04
Depth (bgs)	0 – 2	5 – 6
Manganese	244	378

BW9-32		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	7.7	6.1
Barium	47.3	77.5
Cadmium	0.79	2.9
Chromium	18.3	51.2
Cobalt	5.3	5.5
Copper	19.9 J	56.0 J
Lead	20.9 J	88.9 J
Manganese	397	506
Mercury	0.058	0.081
Nickel	14.3	22.4
Zinc	92.2	414

SW9-12	
Date	01/03/02
Depth (bgs)	0 – 2
Chromium	229 [160]
Manganese	1,600 J [1,400 J]

BW9-02		
Date	07/17/01	07/17/01
Depth (bgs)	0.9 – 2	8 – 10
Arsenic	8.14	4.15
Cadmium	2.49	0.301 J
Chromium	82	5.55
Cobalt	3.88	3.91
Copper	126	13
Lead	322	5.23
Manganese	1,840	265
Nickel	28.8	8.62
Silver	0.588	ND
Zinc	676	45.7

BW9-01		
Date	07/16/01	07/16/01
Depth (bgs)	0 – 2	8 – 10
Arsenic	8.89	9.09
Cadmium	5.74	4.21 J
Chromium	138	213
Cobalt	5.93	7.38
Copper	142	247
Cyanide (total)	0.26 J	0.612 J
Lead	2.59	2.30
Manganese	1,290	1,540
Mercury	0.143	0.183
Nickel	36.7	68.3
Selenium	0.497 J	ND
Silver	0.427 J	0.426 J
Zinc	1,290	1,880

SW9-03	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	6.09 [5.45]
Chromium	18.7 [15.4]
Cobalt	5.47 [5.37]
Lead	41.6 [45.1]
Manganese	339 [299]
Zinc	95.9 [88.4]

BCC-61		
Date	06/01/04	06/01/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	4.9 J	4.67 J
Chromium	11.2 J	10.4 J
Cobalt	5.32	4.72
Manganese	271	236

BCC-62		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	6.84 J	6.18 J
Barium	94.1 J	36.9 J
Chromium	24.8 J	10.8 J
Cobalt	5.33 J	5.12 J
Lead	68.7 J	14.1 J
Manganese	364 J	285 J
Mercury	0.0695	0.0442
Zinc	234 J	46.1 J

BCC-51-4			
Date	08/06/04	08/06/04	08/06/04
Depth (bgs)	0 – 2	7.8 – 8	8 – 10
Manganese	683	251	190

BCC-51-1			
Date	08/06/04	08/06/04	08/06/04
Depth (bgs)	0 – 2	7.33 – 8	8 – 10
Manganese	362	155	308

SW9-11	
Date	01/03/02
Depth (bgs)	0 – 2
Arsenic	8.13 J
Chromium	108
Manganese	1,530 J

BCC-58-3			
Date	07/29/04	07/29/04	07/29/04
Depth (bgs)	0.75 – 2.75	6 – 8	10 – 12
Barium	15.2	188	9.61
Chromium	18.5 J	30 J	4.77 J
Cobalt	1.76	3.15	2.99
Lead	10.8 J	188 J	3.96 J
Manganese	265	630	253
Mercury	0.009 J	0.0503	0.0085 J

BCC-58-2			
Date	07/29/04	07/29/04	07/29/04
Depth (bgs)	0.5 – 2.5	6 – 8	10 – 12
Chromium	4.01 J	5.85 J	5.68 J
Cobalt	1.95	2.67	3.4
Manganese	125	158	252

BCC-58-8	
Date	02/08/06
Depth (bgs)	0 – 2
Manganese	440 J

BW9-11			
Date	07/31/03	07/31/03	07/31/03
Depth (bgs)	2 – 4	5 – 7	7 – 9
Arsenic	2.81	6.28	3.46
Barium	31.7 J	96.7 J	57.5 J
Chromium	26	161	16.4
Cobalt	2.73	4.64	4.1
Copper	18.9 J	74.8 J	24.3 J
Lead	69 J	84.6 J	34.1 J
Manganese	630 J	1,690 J	403 J
Mercury	0.18	0.0367	0.0261 J
Nickel	12.5	29.5	14.4
Zinc	30.3	122	34.8

BCC-58			
Date	06/03/04	06/03/04	07/29/04
Depth (bgs)	0.6 – 2	6 – 8	10 – 12
Antimony	0.355 J	4.62 J	0.164 J
Arsenic	5.91 J	9.58 J	2.47 J
Barium	24.8 J	86.1 J	21.5
Chromium	22.4 J	51.8 J	8.3 J
Cobalt	4.2 J	3.63 J	4.61
Copper	35.3 J	17.8 J	6.05 J
Lead	32.9 J	394 J	5.1 J
Manganese	405 J	2,210 J	252
Mercury	0.0083 J	0.0898	0.0143 J
Zinc	47.3 J	26.7 J	22.6

SW9-10	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	9.43
Barium	105
Cadmium	3.47
Chromium	195
Cobalt	7.38
Copper	160
Lead	139
Manganese	1,470
Mercury	0.115
Nickel	50.3
Zinc	758 J

MWW9-01			
Date	07/28/03	07/28/03	07/28/03
Depth (bgs)	1 – 2	8 – 10	24.5 – 26.5
Antimony	1.12 J	0.249 J	6.2 J
Arsenic	6.43	1.45	2.64
Barium	96.5 J	16.4 J	15.1 J
Cadmium	1.22	0.0244 J	ND
Chromium	33.1 J	7.29 J	15 J
Cobalt	5.15	1.34	2.36
Copper	45.3	7.36	14.4
Lead	89.5	65.2	308
Manganese	504 J	141 J	137 J
Mercury	0.0652	ND	0.0422
Nickel	40.9	7.65	12.9
Zinc	136	14.3	14.4

BCC-58-1			
Date	07/29/04	07/29/04	07/29/04
Depth (bgs)	0.75 – 2.75	6 – 8	10 – 12
Arsenic	3.49 J	4.11 J	7.27 J
Chromium	18.9 J	21.4 J	18.1 J
Cobalt	3.35	7.1	6.18
Copper	36.3 J	23.5 J	22.3 J
Lead	13.6 J	36.6 J	9.54 J
Manganese	454	675	152
Mercury	0.056	0.0542	0.0351 J
Nickel	12.4	21.6	15.5
Zinc	31.8	77.2	46.7

BCC-58-5			
Date	08/10/04	08/10/04	08/10/04
Depth (bgs)	0.6 – 2.6	6.5 – 8	8 – 10
Manganese	99.9	2,340	107

BCC-58-4			
Date	07/29/04	07/29/04	07/29/04
Depth (bgs)	0.7 – 2.7	6 – 8	10 – 12
Arsenic	5.48 J	3.51 J	3.71 J
Barium	87.2	56.9	21.9
Chromium	73.6 J	40.3 J	11.1 J
Cobalt	4.47	2.86	6.46
Copper	73.2 J	39.5 J	9.36 J
Lead	97.2 J	191 J	11.1 J
Manganese	2,440	1,360	257
Mercury	0.0594	0.0332 J	0.026 J
Nickel	33.3	17.3	8.95
Silver	ND	0.149 J	ND
Zinc	95.4	57.7	29.1

BCC-58-7		
Date	08/10/04	08/10/04
Depth (bgs)	0.7 – 2.7	2.7 – 4
Manganese	472	10,700

BCC-58-6			
Date	08/10/04	08/10/04	08/10/04
Depth (bgs)	0 – 2	7 – 8	8 – 10
Manganese	1,260	964	81.8

BCC-59		
Date	06/02/04	06/02/04
Depth (bgs)	1.3 – 2.3	6 – 8
Chromium	14.2 J	4.25 J
Cobalt	22.5	2.17
Copper	32.2 J	6.38 J
Lead	206	2.77
Manganese	258	142
Nickel	22.8 J	4.41 J

SW9-01	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	10.1
Cadmium	2.11 J
Chromium	249
Cobalt	7.35
Copper	154
Lead	175
Manganese	1,360
Mercury	0.0973
Nickel	51.2
Silver	0.653
Zinc	942

SW9-02	
Date	06/27/01
Depth (bgs)	0 – 2
Antimony	6.26 J
Arsenic	19.2
Barium	126
Cadmium	5.86
Chromium	523
Cobalt	14.1
Copper	460
Lead	429
Manganese	2,650
Mercury	0.328
Nickel	154
Selenium	1.71 J
Silver	0.566
Zinc	2,340

BCC-60		
Date	06/01/04	06/01/04
Depth (bgs)	1.8 – 2.8	6 – 8
Chromium	45.5 J	3.22 J
Cobalt	4.64	1.86
Manganese	525	99.5
Selenium	0.44 J	ND

BCC-60-1			
Date	07/23/04	07/26/04	07/23/04
Depth (bgs)	0.66 – 2.66	2 – 4	8 – 9
Arsenic	6.81 J	2.93	6.04 J
Chromium	17.3 J	8.06	9.43 J
Cobalt	7.49	3.91	6.48 J
Manganese	354	231	376 J
Nickel	21.3 J	9.47	15.1 J

BCC-60-2			
Date	07/23/04	07/23/04	07/23/04
Depth (bgs)	1.25 – 3.25	6 – 8	8 – 9
Arsenic	2.18 J	9.88 J	10.6 J
Chromium	14 J	10.6 J	7.28 J
Cobalt	7.79	8.78	4.73
Manganese	352	343	487

SW9-04	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	6.29
Chromium	13.2
Cobalt	6.38
Copper	34.2
Lead	29.4
Manganese	292
Zinc	97.7

LEGEND:

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- APPROXIMATE CUT AREAS
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- * — EXCEEDS MDEQ 2013 NONRESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA
- EXCEEDS MDEQ 2013 SOIL SATURATION CONCENTRATION SCREENING LEVEL
- 1,520 — EXCEEDS MDEQ 2013 NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- 2.3 — EXCEEDS MDEQ 2013 SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA

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   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
INORGANICS EXCEEDANCES IN SOIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1F

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BD-6					
Date	09/25/01	09/25/01	09/26/01	09/26/01	09/27/01
Depth (ft bgs)	0.3 – 2	8 – 10	76 – 78	98 – 100	134 – 136
Arsenic	2.86	1.79	4.76	1.5	3.44
Chromium	8.78	7.07	9.13	3.04	6.63
Cobalt	2.07	1.44	3.66	1.32	3.09
Manganese	162	111	210	114	230

SBDW21	
Date	12/19/95
Depth (ft bgs)	18 – 20
Aluminum	4,360
Arsenic	5.02
Chromium	8.01
Cobalt	5.86
Iron	8,670
Magnesium	13,600
Manganese	192

SBSB1	
Date	12/12/95
Depth (ft bgs)	16 – 18
Aluminum	1,660
Chromium	3.85
Iron	3,360
Manganese	87.6

SBSB3	
Date	12/14/95
Depth (ft bgs)	16 – 18
Aluminum	2,070
Chromium	3.8
Iron	4,400
Magnesium	13,200
Manganese	117

SBSB4	
Date	12/15/95
Depth (ft bgs)	6 – 8
Aluminum	6,580
Chromium	10.3
Cobalt	3.07
Iron	14,200
Manganese	563

SBSB5	
Date	12/12/95
Depth (ft bgs)	4 – 6
Aluminum	3,910
Antimony	1,740*
Arsenic	35.7
Barium	1,200
Cadmium	5.18
Chromium	1,020
Cobalt	34.6
Copper	729
Cyanide (total)	4.1
Iron	376,000
Lead	573
Manganese	3,510
Mercury	2.23
Nickel	354
Selenium	7.67
Vanadium	61.4
Zinc	932

SBWD1	
Date	12/18/95
Depth (ft bgs)	14 – 16
Aluminum	3,600
Chromium	20.3 J
Iron	6,280
Manganese	936

SBWD2	
Date	12/18/95
Depth (ft bgs)	24 – 26
Aluminum	2,880
Chromium	13.8
Iron	7,430
Lead	1,300*
Manganese	223

SBWD3	
Date	12/18/95
Depth (ft bgs)	24 – 26
Aluminum	2,600
Chromium	10
Cyanide (total)	0.51
Iron	7,830
Lead	94.1
Manganese	120
Nickel	21.6

TP-W1-03	
Date	09/06/01
Depth (ft bgs)	10
Arsenic	5.75
Chromium	19.2
Cobalt	6.03
Cyanide (total)	1.65
Manganese	511

TP-W1-01	
Date	09/06/01
Depth (ft bgs)	7
Arsenic	5.47
Chromium	39.2
Cobalt	3.55 J
Copper	74.1
Cyanide (total)	0.362 J
Lead	135 J
Manganese	818 J
Mercury	0.0848
Nickel	24.5 J
Zinc	585 J

TP-W1-02	
Date	09/06/01
Depth (ft bgs)	9
Chromium	37.4
Cobalt	5.17
Cyanide (total)	1.75
Manganese	2,080
Thallium	2.59

BW9-25		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	5.0	5.6
Chromium	11.0	12.9
Cobalt	5.0	5.8
Manganese	299	290

BW9-24		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	6.3	8.4
Barium	41.5	126
Cadmium	0.32 J	3.6
Chromium	11.4	94.5
Cobalt	5.4	7.3
Copper	16.0 J	99.0 J
Lead	26.8 J	135 J
Manganese	359	542
Mercury	0.035 J	1.9
Nickel	13.1	58.8
Zinc	50.2	518

BW9-26		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	4.4	5.6
Chromium	10.8	11.3
Cobalt	3.4	5.5
Manganese	204	300
Mercury	0.058	0.035 J
Nickel	8.9	24.2
Zinc	33.0	113

BW9-04		
Date	07/22/03	07/22/03
Depth (bgs)	0.3 – 2	4.5 – 6.5
Arsenic	4.54	5.62
Chromium	17.8 J	12.1 J
Cobalt	5.89	5.94
Lead	68.7 J	6.68 J
Manganese	351 J	331 J
Nickel	26.2	15.4

SW9-13		
Date	01/03/02	
Depth (bgs)	0 – 2	
Manganese	307 J	

SW9-06		
Date	06/27/01	
Depth (bgs)	0 – 2	
Arsenic	7.67	
Barium	131	
Cadmium	1.33	
Chromium	63.1	
Cobalt	8.51	
Copper	53.8	
Lead	232	
Manganese	402	
Mercury	0.155	
Nickel	30	
Silver	0.229 J	
Zinc	437	

BCC-74-4		
Date	08/11/04	
Depth (ft bgs)	0 – 2	
Arsenic	6.26	

BCC-74		
Date	06/03/04	06/03/04
Depth (ft bgs)	0 – 2	5 – 7
Arsenic	91.9 J *	6.81 J
Chromium	10.5 J	16.7 J
Cobalt	4.35 J	6.73 J
Lead	38 J	7.9 J
Manganese	177 J	212 J
Mercury	0.182	0.0347 J

BCC-73		
Date	06/03/04	06/03/04
Depth (ft bgs)	0 – 2	5 – 7
Arsenic	4.13 J [5.3 J]	7.39 J
Barium	48.3 J [40.9 J]	81.3 J
Chromium	10.9 J [11.8 J]	16.8 J
Cobalt	5.44 J [6.89 J]	10.6 J
Manganese	186 J [270 J]	519 J
Selenium	ND [0.537 J]	ND

BCC-74-1		
Date	08/11/04	08/11/04
Depth (ft bgs)	0 – 2	6 – 8
Arsenic	14.3	4.77

BCC-75		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	5 – 7
Arsenic	3.43 J	6.69 J
Chromium	12.4 J	14.5 J
Cobalt	2.54 J	10.3 J
Manganese	329 J	639 J

SW9-05	
Date	06/27/01
Depth (bgs)	0 – 2
Arsenic	5.13
Chromium	10.4
Cobalt	5
Manganese	281

BCC-55		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	4.79 J	4.29 J
Chromium	11.4 J	11.5 J
Cobalt	4.56 J	4.64 J
Manganese	253 J	266 J
Zinc	53.9 J	39.5 J

BW9-27		
Date	04/18/05	04/18/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	6.4	4.2
Chromium	16.2	12.6
Cobalt	5.6	4.6
Copper	35.1 J	11.7 J
Manganese	285	440
Mercury	0.038	0.083
Zinc	57.3	45.4

BCC-52		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	4.97 J	4.63 J
Chromium	10.7 J	9.16 J
Cobalt	5.37 J	4.78 J
Manganese	360 J	236 J
Zinc	49.6 J	52.7 J

BW9-29		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	5.3	6.5
Chromium	10.5	12.8
Cobalt	5.2	6.8
Manganese	465	345
Zinc	33.7	56.8

BW9-30		
Date	04/18/05	04/18/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	9.5	3.1
Chromium	12.9	4.7
Cobalt	7.3	2.8
Manganese	407	208
Zinc	67.2	28.5

BW9-05			
Date	07/22/03	07/22/03	07/22/03
Depth (bgs)	1.5 – 2.5	8 – 10	10 – 12
Arsenic	4.87	3.05	3.59
Chromium	10.5 J	4.38 J	4.52 J
Cobalt	4.33	2.55	5.46
Manganese	261 J	179 J	409 J

BW9-28		
Date	04/18/05	04/18/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	5.1	5.6
Chromium	10.5	12.9
Cobalt	4.8	4.6
Lead	17.0 J	29.9 J
Manganese	345	315
Mercury	ND	0.092
Zinc	50.6	74.1

BCC-53		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	4.82 J	13.3 J
Barium	24.5 J	90 J
Cadmium	0.557 J	5.86 J
Chromium	11.1 J	136 J
Cobalt	4.12 J	8.88 J
Copper	15.5 J	180 J
Lead	18.6 J	221 J
Manganese	232 J	1,820 J
Mercury	0.0143 J	1.42
Nickel	11.5 J	60.2 J
Silver	ND	0.898
Zinc	92 J	4,870 J

BW9-31		
Date	04/18/05	04/18/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	4.7	4.1
Chromium	14.4	5.2
Cobalt	7.3	3.2
Manganese	367	263

BW9-06		
Date	07/22/03	07/22/03
Depth (bgs)	0.3 – 2	6 – 8
Chromium	6.13 J	4.81 J
Cobalt	3.48	2.84
Manganese	263 J	227 J

BCC-54		
Date	06/03/04	06/03/04
Depth (bgs)	0 – 2	6 – 8
Arsenic	5.49 J [3.58 J]	4.93 J
Chromium	11.5 J [13.7 J]	10.2 J
Cobalt	5.79 J [5.41 J]	3.83 J
Copper	32.7 J [23.5 J]	22 J
Lead	22.4 J [16.4 J]	29.9 J
Manganese	267 J [232 J]	287 J
Mercury	0.214 [0.0537]	0.0314 J
Zinc	73.4 J [49.6 J]	59.7 J

EXACT LOCATIONS WITHIN THE USPS PROPERTY COULD NOT BE VERIFIED

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

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0 125' 250'
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FIGURE
1G

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BW8–02		
Date:	09/05/01	09/05/01
Depth (ft bgs):	0 – 2	8 – 10
Chromium	12.1	15.7
Cobalt	5.09	3.21
Lead	15.4	24
Manganese	315	353

INJ–01–17		
Date	10/17/17	10/17/17
Depth (ft bgs)	16 – 17	20 – 21
Chromium	8.44	3.23
Cobalt	7.82	1.79
Manganese	361	563
Selenium	0.91	ND

MWW8–03			
Date:	09/04/01	09/04/01	09/04/01
Depth (ft bgs):	2 – 4	8 – 10	24 – 26
Arsenic	3.89	2.84	6.07
Chromium	7.19	5.2	10.1
Cobalt	3.01	2.56	5.99
Manganese	174	174	258
Selenium	ND	ND	0.556 J

MWW8–12		
Date:	02/06/02	02/06/02
Depth (ft bgs):	1 – 3	8 – 10
Arsenic	5.12	5.08 [4.8]
Chromium	10.5	15.2 J [9.72]
Cobalt	5.12	7.68 J [5.83]
Manganese	229	183 J [261]

MWW8–04			
Date:	09/04/01	09/04/01	09/04/01
Depth (ft bgs):	2 – 4	8 – 10	10 – 12
Chromium	12.1	9.27	12.5
Cobalt	5.97	3.99 J	5.81
Manganese	558	242	307

MWW8–11		
Date:	02/04/02	02/04/02
Depth (ft bgs):	0.8 – 2	8 – 10
Arsenic	4.68	4.79
Barium	169 J	17.5 J
Chromium	8.1	9.95
Cobalt	2.85	5.1
Manganese	353	179

BW8–108		
Date:	08/02/05	08/02/05
Depth (ft bgs):	0 – 2	8 – 10
Chromium	12.5	10.6
Cobalt	5.0 J	5.2 J
Manganese	239 J	239 J
Mercury	0.13	0.019 J

BW8–118			
Date:	08/25/05	08/25/05	08/25/05
Depth (ft bgs):	0 – 2	8 – 10	12 – 14
Arsenic	4.4	5.8	6.3
Chromium	12.2	13.0	8.9
Cobalt	4.3	6.4	4.8
Manganese	344	307	234

BW8–05		
Date:	07/22/03	07/22/03
Depth (ft bgs):	0.7 – 2	7 – 9
Chromium	12	10.9 [9.48]
Cobalt	6.65	4.39 [3.71]
Manganese	276 J	187 J [186 J]

BW8–01			
Date:	09/05/01	09/05/01	09/06/01
Depth (ft bgs):	2 – 4	8 – 10	10 – 12
Arsenic	5.45	7.7	8.43
Cobalt	2.47	1.73	4.79
Manganese	127	114	273

BW8–04		
Date:	07/22/03	07/22/03
Depth (ft bgs):	0 – 2	5 – 7
Arsenic	7.48	5.67 E
Barium	30.9 J	79.2 J
Chromium	10.1	40.7 E
Cobalt	4.36	5.12 E
Lead	9.62	81.6 E
Manganese	397 J	744 E
Vanadium	13.2	35.8
Zinc	35.8	98.6

BCC–20	
Date:	08/10/04
Depth (ft bgs):	2 – 4
Barium	124 J
Chromium	30.6
Cobalt	5.57
Copper	34.5
Lead	22.5
Manganese	640
Mercury	0.0764 J
Nickel	21.3
Zinc	57.5

MWW8–13			
Date:	05/29/03	05/29/03	05/29/03
Depth (ft bgs):	0.7 – 2	8 – 10	15 – 17
Arsenic	3.42	4.82	5.11
Chromium	21.5 J	16.3 J	16.5 J
Cobalt	2.9	7.88	6.71
Lead	21.9	7.91	7.67
Manganese	507 J	652 J	535 J

MWW8–05		
Date:	08/20/01	08/20/01
Depth (ft bgs):	0 – 2	8 – 10
Arsenic	26.9	6.02
Barium	124	19.7
Chromium	112	8.44
Cobalt	6.93	3.96
Copper	91.3	11.3
Lead	94.6	5.76
Manganese	1,290	251
Mercury	0.531	0.0311 J
Nickel	41.8	9.95 J
Selenium	0.627 J	ND
Zinc	146	31.1

SSTT1	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
Aluminum	3,450
Arsenic	7.77 J
Cadmium	2.11
Chromium	81.9
Cobalt	6.66
Copper	57.9 J
Cyanide (total)	0.59
Iron	69,000
Lead	151
Manganese	2,080
Nickel	25 J
Silver	0.357
Zinc	3,640

SBTT1	
Date	01/22/96
Depth (ft bgs)	10 – 15
Aluminum	2,740
Chromium	12.4 J
Cyanide (total)	0.48
Iron	6,660
Manganese	894

BW9–03			
Date	07/28/03		07/28/03	07/28/03
Depth (bgs)	0.7 – 2		3 – 5	8 – 10
Arsenic	5.75 [7.39]		1.01	4.9
Barium	116 J [193 J]		10.8 J	54 J
Chromium	86.6 J [164 J]		5.08 J	17.5 J
Cobalt	4.36 [4.69]		0.776 J	7.26
Copper	63.1 [111]		2.31	16.7
Lead	67.2 [113]		5.58	7.68
Manganese	1,680 J		232 J	256 J
Mercury	0.0505 [0.0397]		ND	ND
Nickel	22.5 [26.4]		2.08 J	20.6
Zinc	131 [194]		5.19	41.4

SW9–08	
Date	06/27/01
Depth (bgs)	0 – 2
Chromium	10.1
Cobalt	5.09
Manganese	264

BW9–12			
Date	07/30/03	07/30/03	07/30/03
Depth (bgs)	0.5 – 2	8 – 10	20 – 22
Chromium	4.12 J	14.9	27.5
Cobalt	2.44	1.39	2.44
Lead	3.16 J	23.5 J	88 J
Manganese	154 J	147 J	781 J
Mercury	ND	0.0376	0.207
Nickel	5.88 J	16.6	31.8

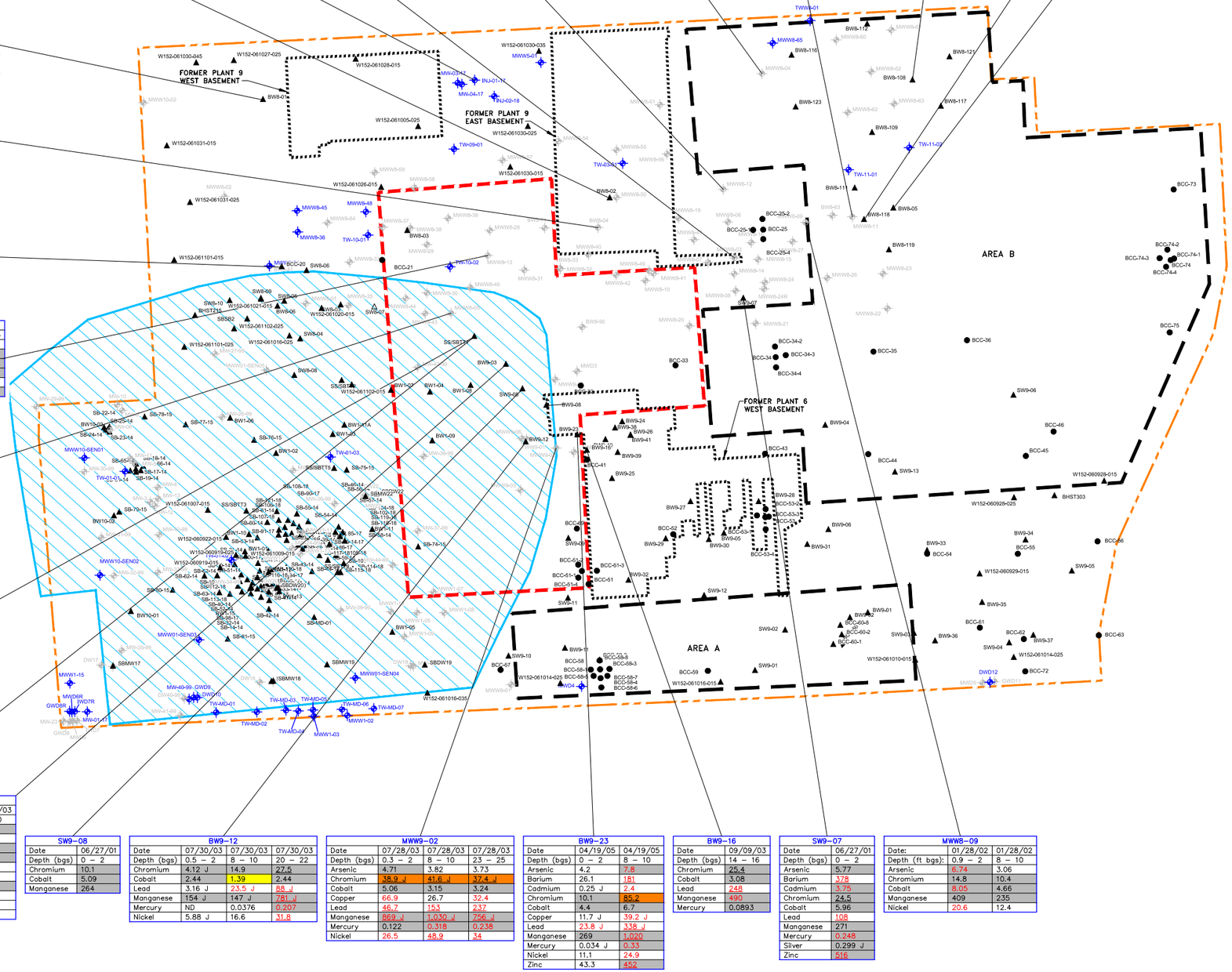
MWW9–02			
Date	07/28/03	07/28/03	07/28/03
Depth (bgs)	0.3 – 2	8 – 10	23 – 25
Arsenic	4.71	3.82	3.73
Chromium	38.9 J	41.6 J	37.4 J
Cobalt	5.06	3.15	3.24
Copper	66.9	26.7	32.4
Lead	46.7	153	237
Manganese	869 J	1,030 J	756 J
Mercury	0.122	0.318	0.238
Nickel	26.5	48.9	34

BW9–23		
Date	04/19/05	04/19/05
Depth (bgs)	0 – 2	8 – 10
Arsenic	4.2	7.8
Barium	26.1	181
Cadmium	0.25 J	2.4
Chromium	10.1	85.2
Cobalt	4.4	6.7
Copper	11.7 J	39.2 J
Lead	23.8 J	338 J
Manganese	269	1,020
Mercury	0.034 J	0.33
Nickel	11.1	24.9
Zinc	43.3	452

BW8–16		
Date	09/09/03	
Depth (bgs)	14 – 16	
Chromium	25.4	
Cobalt	3.08	
Lead	248	
Manganese	490	
Mercury	0.0893	

SW9–07		
Date	06/27/01	
Depth (bgs)	0 – 2	
Arsenic	5.77	
Barium	378	
Cadmium	3.75	
Chromium	24.5	
Cobalt	5.96	
Lead	108	
Manganese	271	
Mercury	0.248	
Silver	0.299 J	
Zinc	516	

MWW8–09		
Date:	01/28/02	01/28/02
Depth (ft bgs):	0.9 – 2	8 – 10
Arsenic	6.74	3.06
Chromium	14.8	10.4
Cobalt	8.05	4.66
Manganese	409	235
Nickel	20.6	12.4


FORMER PLANT 9 WEST BASEMENT
FORMER PLANT 9 EAST BASEMENT
FORMER PLANT 6 WEST BASEMENT
AREA A
AREA B
TWW8-01
MWW8-65
BW8-116
BW8-123
BW8-108
BW8-121
BW8-117
BW8-109
TW-11-01
TW-11-02
BW8-111
BW8-118
BW8-05
BW8-119
BW8-123
BCC-73
BCC-74-2
BCC-74-3
BCC-74-1
BCC-74
BCC-74-4
BCC-75
BCC-25-2
BCC-25
BCC-25-4
BCC-25-3
BCC-34-2
BCC-34
BCC-34-3
BCC-34-4
BCC-33
BCC-35
BCC-36
BCC-43
BCC-44
BCC-45
BCC-46
SW9-13
SW9-06
W152-060928-015
W152-060928-025
BHST303
BW9-04
BW9-24
BW9-38
BW9-26
BW9-41
BW9-39
BW9-16
BW9-25
BW9-12
BW9-23
BW9-28
BCC-53-2
BCC-53-3
BCC-53-4
BCC-42
BCC-41
BW9-27
BW9-29
BW9-30
BW9-05
BW9-31
BW9-06
BW9-33
BW9-34
BW9-55
BCC-54
BCC-56
BW9-05
W152-060929-015
BW9-35
BCC-61
BCC-62
BW9-37
BW9-36
BW9-04
BCC-63
W152-061010-015
W152-061014-025
DWD12
BCC-72
BW9-01
BW9-02
SW9-02
SW9-01
BCC-59
W152-061016-015
BW9-10
BCC-58
BCC-58-3
BCC-58-2
BCC-58-7
BCC-58-4
BCC-58-6
BCC-57
BW9-11
BCC-61-2
BCC-61-3
BCC-61
BCC-61-4
BW9-32
SW9-11
BW9-12
BW9-03
BW9-08
BW9-09
BW9-90
SW9-10
SW9-03
BW1-03
BW1-04
BW1-05
BW1-A
BW1-06
BW1-09
BW1-02
BW1-01
BW10-01
BW10-02
TW-01-03
TW-01-14
TW-01-04
TW-01-13
TW-01-05
TW-01-12
TW-01-06
TW-01-11
TW-01-07
TW-01-10
TW-01-08
TW-01-09
MWW10-SEN01
MWW10-SEN02
MWW01-SEN03
MWW01-SEN04
MW-40-99-GWD9
MWW1-15
MWW1-01
MWW1-02
MWW1-03
TW-MD-01
TW-MD-02
TW-MD-03
TW-MD-04
TW-MD-05
TW-MD-06
TW-MD-07
GWD8R
GWD7R
GWD9R
GWD10
W152-061030-035
MWW5-01
W152-061030-045
W152-061027-025
W152-061028-015
BW9-01
INJ-01-17
MW-04-17
INJ-02-18
W152-061030-025
W152-061005-025
TW-09-01
TW-03-01
W152-061030-015
W152-061031-015
W152-061031-025
W152-061026-015
MWW8-45
MWW8-48
MWW8-36
TW-10-01
BW8-03
BW8-02
BW8-04
W152-061101-015
MWW8-CC-20
SW8-06
BCC-21
TW-10-02
SW8-09
SW8-10
BHST216
W152-061021-015
BW8-05
SW8-05
W152-061020-015
SW8-07
SBSB2
W152-061102-025
SW8-04
W152-061101-025
W152-061016-025
SW8-08
SS/SBT216
SS/SBT215
SS/SBT15
SS/SBT13
W152-061007-015
W152-060922-015
W152-060919-015
W152-061009-015
MWW10-SEN05
MWW10-SEN06
MWW10-SEN07
MWW10-SEN08
MWW10-SEN09
MWW10-SEN10
MWW10-SEN11
MWW10-SEN12
MWW10-SEN13
MWW10-SEN14
MWW10-SEN15
MWW10-SEN16
MWW10-SEN17
MWW10-SEN18
MWW10-SEN19
MWW10-SEN20
MWW10-SEN21
MWW10-SEN22
MWW10-SEN23
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MWW10-SEN28
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MWW10-SEN31
MWW10-SEN32
MWW10-SEN33
MWW10-SEN34
MWW10-SEN35
MWW10-SEN36
MWW10-SEN37
MWW10-SEN38
MWW10-SEN39
MWW10-SEN40
MWW10-SEN41
MWW10-SEN42
MWW10-SEN43
MWW10-SEN44

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM: (Req) LYR: (Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\IBM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD\18\01-DWG\FIG11-DATABOX.DWG LAYOUT: 11 SAVED: 12/7/2018 12:24 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/7/2018 12:42 PM BY: STOWELL, GARY
XREFS: X-PNC-DL
IMAGES:

SW8–06	
Date:	01/14/02
Depth (ft bgs):	0 – 2
Chromium	32
Manganese	321

MWW10–02		
Date	01/28/02	01/28/02
Depth (ft bgs)	0.6 – 2	8 – 10
Chromium	4.59	4.84
Cobalt	1.95	2.2
Manganese	157	172

MWW8–02				
Date:	08/29/01	08/29/01	08/29/01	08/29/01
Depth (ft bgs):	0.5 – 2	6 – 8	8 – 10	12 – 14
Antimony	7.46 J	ND	ND	ND
Arsenic	36.2	7.49	2.5	5.05
Barium	509	85.9	67	121
Cadmium	ND	ND	0.212 J	5.46
Chromium	*857*	156	156	17.6
Cobalt	40.6	8.34	6.14	7.5
Copper	1,920	20	21.9	205
Lead	587	14.7	10.4	31
Manganese	*2,780*	236	230	337
Mercury	0.699	0.0983	0.0815	0.272
Nickel	1,890	16.6	16.2	28.5
Selenium	8.62	0.622	ND	ND
Silver	0.925 J	ND	ND	ND
Vanadium	29.3	29.2	14.6	19.1
Zinc	879	48.5	40.6	192

MWW8–01			
Date:	08/29/01	08/29/01	08/29/01
Depth (ft bgs):	0.7 – 2	8 – 10	10 – 12
Arsenic	4.99	2.54	2.17
Chromium	14.6	4.17	4.88
Cobalt	3.58 J	2.35	2.06
Manganese	351	221	149
Mercury	0.117	ND	ND
Zinc	47.2 J	21.6	17.8

SW8–09	
Date:	02/04/02
Depth (ft bgs):	0.5 – 2
Manganese	*2,040*

SW8–10	
Date:	02/07/02
Depth (ft bgs):	0.5 – 2
Manganese	1.31 J

SW8–05	
Date:	01/14/02
Depth (ft bgs):	0.5 – 2
Chromium	*4.33 [203]*
Manganese	*1,750 [952]*

SBSB2	
Date	12/14/95
Depth (ft bgs)	4 – 6
Aluminum	10,800
Arsenic	5.39
Chromium	78.2
Cobalt	6.73
Iron	14,800
Lead	30.1
Magnesium	16,500
Manganese	335

BW8–06			
Date:	07/28/03	07/28/03	07/28/03
Depth (ft bgs):	0.5 – 2	2 – 4	6 – 8
Antimony	5.33 J	31.5 J	101 J
Arsenic	25.5	16.1	54 *
Barium	432 J	4,040 J	429 J
Cadmium	ND	38.5	ND
Chromium	*726 J*	*363 J*	123 J
Cobalt	20.2	7.79	64.2
Copper	1,570	4,930	25,800
Lead	179	2,820 *	8,440 *
Manganese	*1,390 J*	*777 J*	*1,600 J*
Mercury	0.269	6.55	0.0223 J
Nickel	424	251	151
Selenium	ND	ND	4.89 J
Silver	ND	0.765	2.61
Vanadium	25.3	25.1	52
Zinc	192	5,820	5,080

BW1–06			
Date	01/11/02	01/11/02	01/11/02
Depth (ft bgs)	1 – 2	2 – 4	4 – 6
Chromium	12	6.52	4.44
Cobalt	3.22	2.43	1.62
Copper	37.8	12.3	16.1
Manganese	216	212	148
Zinc	54.6	25.7	18.8

SW8–04	
Date:	01/14/02
Depth (ft bgs):	0 – 2
Chromium	*264*
Manganese	*2,770*

SW8–08	
Date:	02/04/02
Depth (ft bgs):	0 – 2
Manganese	1,170

BW8–03			
Date:	07/28/03	07/28/03	07/28/03
Depth (ft bgs):	0.5 – 2	3 – 5	8 – 10
Arsenic	7.2	7.08	5.3
Barium	99.5 J	131 J	38.6 J
Chromium	153 J	16.4 J	13.4 J
Cobalt	5.63	4.51	6.8
Copper	92.9	44.9	16.2
Lead	29.8	56.3	6.79
Manganese	*1,660 J*	276 J	349 J
Mercury	0.045	0.201	0.0203 J
Nickel	82	27.5	18.2
Selenium	ND	0.88	ND
Zinc	68.8	63.2	40.9

MWW8–29			
Date:	11/11/04	11/11/04	11/11/04
Depth (ft bgs):	0.6 – 2	8 – 10	11 – 13
Arsenic	2.7	8.0	2.8
Chromium	26.3	18.0	7.4
Cobalt	2.2	8.7	3.6
Manganese	633	429	117
Mercury	0.30	0.026 J	0.033 J
Nickel	15.1	22.8	6.6
Zinc	27.5 J	49.2 J	24.1 J

MWW8–10		
Date:	01/29/02	01/29/02
Depth (ft bgs):	2 – 4	12 – 14
Chromium	19.8	7.83
Cobalt	2.62	3.42
Lead	31.6	4.79
Manganese	417	358
Mercury	0.0876	ND

BCC–74–4			
Date:	08/11/04	08/11/04	08/11/04
Depth (ft bgs):	0 – 2	6 – 8	8 – 10
Arsenic	6.26	3.83	4.13

BCC–74				
Date:	06/03/04	08/06/04	06/03/04	08/06/04
Depth (ft bgs):	0 – 2	0 – 2	5 – 7	6.75 – 8
Arsenic	91.9 J *	2.92	6.81 J	4.27
Chromium	10.5 J	NA	16.7 J	NA
Cobalt	4.35 J	NA	6.73 J	NA
Lead	38 J	NA	7.9 J	NA
Manganese	177 J	NA	212 J	NA
Mercury	0.182	NA	0.0347 J	NA

BCC–73		
Date:	06/03/04	06/03/04
Depth (ft bgs):	0 – 2	5 – 7
Arsenic	4.13 J [5.3 J]	7.39 J
Barium	48.3 J [40.9 J]	81.3 J
Chromium	10.9 J [11.8 J]	16.8 J
Cobalt	5.44 J [6.89 J]	10.6 J
Manganese	186 J [270 J]	519 J
Selenium	ND [0.537 J]	ND

BCC–74–1			
Date:	08/11/04	08/11/04	08/11/04
Depth (ft bgs):	0 – 2	6 – 8	8 – 10
Arsenic	14.3	4.77	4.01

SW8–07	
Date:	02/04/02
Depth (ft bgs):	0 – 2
Manganese	866

SW8–03	
Date:	01/14/02
Depth (ft bgs):	0.7 – 2
Chromium	*1,260*
Manganese	*1,770*

BW1–08			
Date	01/07/02	01/07/02	01/07/02
Depth (ft bgs)	1 – 2	8 – 10	11 – 13
Chromium	97.7	25.1	123
Manganese	1,100	1,300	*2,040*

BW1–03		
Date	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	4 – 6
Antimony	1.88 J	6.74 J
Arsenic	5.69	35.4
Barium	38	256
Cadmium	1.92	2.02 J
Chromium	104	*6.39*
Cobalt	4.16	24.9
Copper	91.4	1,060
Cyanide (total)	0.232 J	1.59
Lead	126	141
Manganese	1,320	*4,250*
Mercury	0.0474	0.786
Nickel	38	528
Silver	0.36 J	1.43 J
Vanadium	7.3	30
Zinc	936	145

BW1–11A		
Date	07/30/03	07/30/03
Depth (ft bgs)	0 – 2	6 – 8
Arsenic	5.07	15.7
Barium	48.7 J	224 J
Cadmium	3.57 J	R
Chromium	114	*340*
Cobalt	3.85	11.4
Copper	112 J	616 J
Lead	210 J	41.9 J
Manganese	*1,750 J*	*7,260 J*
Mercury	0.074	0.208
Nickel	32.5	103
Silver	0.332 J	ND
Zinc	3,670	54.4

SSTT2	
Date	01/22/96
Depth (ft bgs)	0 – 0.5
Aluminum	4,250
Arsenic	7.27 J
Barium	79.1 J
Cadmium	2.32
Chromium	*251*
Cobalt	11.8
Copper	221
Cyanide (total)	0.36
Iron	10,700
Lead	117
Manganese	*2,040*
Mercury	0.0921
Nickel	84.7 J
Silver	0.487
Zinc	379

SBTT2	
Date	01/22/96
Depth (ft bgs)	15
Aluminum	1,890
Chromium	9.82
Cyanide (total)	0.49
Iron	6,090
Manganese	107
Mercury	0.0821

BW1–09			
Date	01/11/02	01/11/02	01/11/02
Depth (ft bgs)	1 – 2	8 – 10	19 – 21
Chromium	95.2	15.9	50.8
Manganese	*3,670*	340	*1,540*

BW1–07			
Date	01/09/02	01/09/02	01/09/02
Depth (ft bgs)	0 – 2	8 – 10	11 – 13
Chromium	*327*	55.2	17.2
Manganese	*4,620*	1,020	307

BW1–04			
Date	07/16/01	07/16/01	07/16/01
Depth (ft bgs)	0 – 2	8 – 10	12 – 14
Arsenic	6.48	7.54	1.09
Cadmium	5.77	0.153 J	0.125 J
Chromium	117	114	7.12
Cobalt	4.17	4.94	0.97 J
Copper	134	60.1	4.55
Cyanide (total)	0.637	ND	ND
Lead	266	17.1	6.46
Manganese	*2,090*	659	160
Mercury	0.114	ND	ND
Nickel	40.8	62.9	4.6
Selenium	ND	0.557 J	ND
Silver	0.63	ND	ND
Zinc	7,400	55.6	7.98

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- SOIL BORING/SOIL SAMPLE LOCATION
- SURVEYED CONCRETE AND/OR SOIL SAMPLE LOCATION
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER PROTECTION CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE PROTECTION CRITERIA
- 4,700 — EXCEEDS SITE SPECIFIC BACKGROUND CONCENTRATIONS
- 199 — EXCEEDS MDEQ 2013 STATE DEFAULT BACKGROUND LEVELS
- * — EXCEEDS MDEQ 2013 NONRESIDENTIAL DIRECT CONTACT CLEANUP CRITERIA
- EXCEEDS MDEQ 2013 SOIL SATURATION CONCENTRATION SCREENING LEVEL
- *1,520* — EXCEEDS MDEQ 2013 NONRESIDENTIAL PARTICULATE SOIL INHALATION CRITERIA
- **2.3** — EXCEEDS MDEQ 2013 SOIL VOLATILIZATION TO INDOOR AIR INHALATION CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MILLIGRAMS PER KILOGRAM (mg/kg).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. E – EXCEEDS CALIBRATION STANDARD.
8. R – REJECTED DATA.
9. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
   - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
   - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
   - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
   - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
   - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

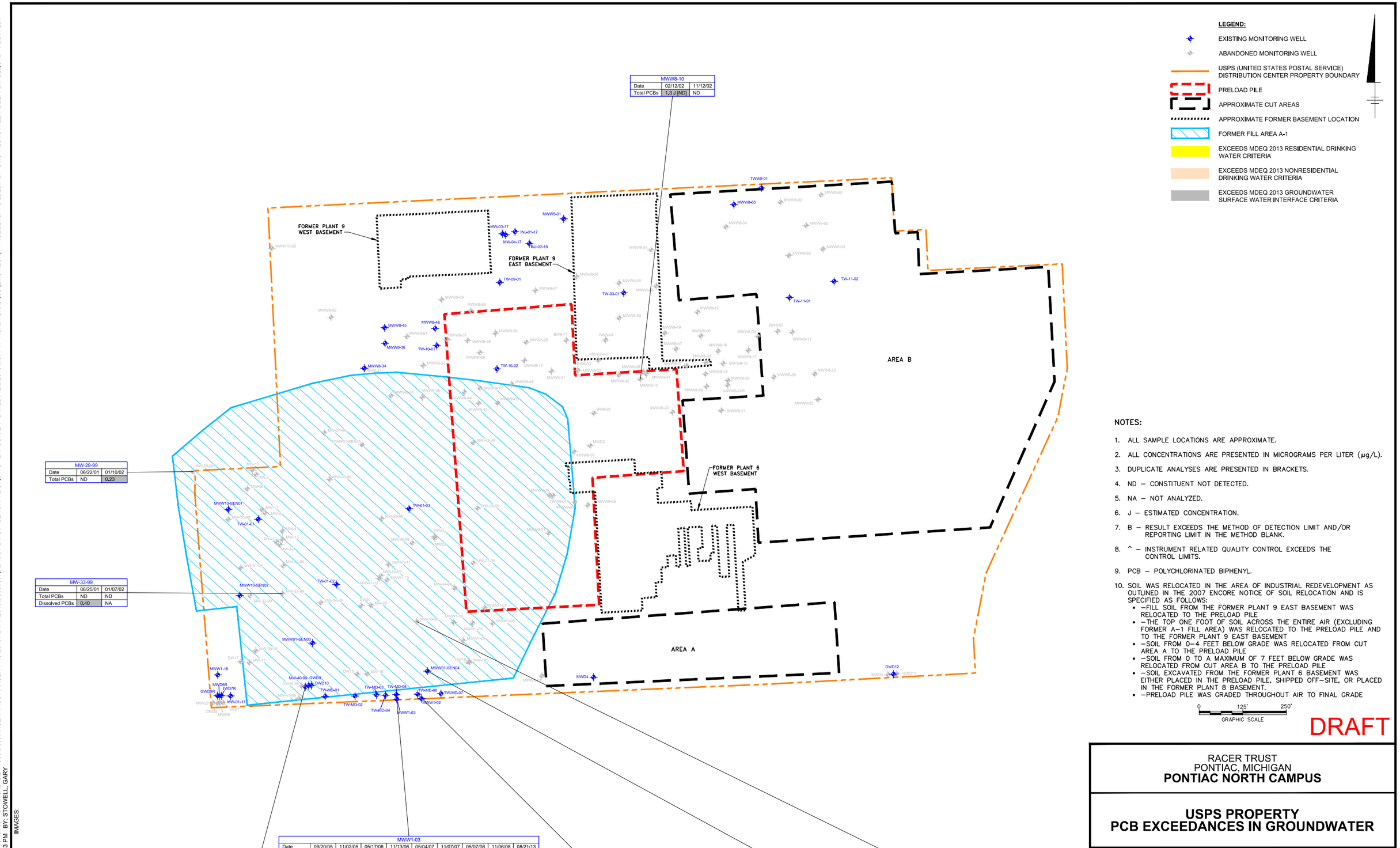
DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
INORGANICS EXCEEDANCES IN SOIL

ARCADIS Design & Consultancy for natural and built assets

FIGURE
11



CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM: (Reqd) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD1801\+DWG\FIG2A-DATABOX.DWG LAYOUT: 2A SAVED: 12/5/2018 9:51 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/5/2018 9:53 PM BY: STOWELL, GARY
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12/5/2018 9:54 PM BY: STOWELL, GARY LAYOUT: 2B SAVED: 12/5/2018 9:44 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS
XREFS: IMAGES:
X-PNC-DL

MWW10-02		
Date	02/12/02	11/14/02
bis(2-Ethylhexyl)phthalate	150 J	ND

MWW8-02		
Date	09/11/01	01/09/02
Phenanthrene	2,3 J	ND

MWW8-13		
Date	08/25/03	12/17/03
2,4-Dimethylphenol	2,500	5,800
Phenol	1,200	2,700

MWW8-10		
Date	02/12/02	11/12/02
Fluorene	21 J	ND
Phenanthrene	ND	4,4 J

MWW8-08		
Date	02/15/02	11/14/02
Phenanthrene	1,5 J	28 J

MWW8-04		
Date	09/17/01	01/09/02
Phenanthrene	3,9 J	1,1 J

MWW8-11		
Date	02/11/02	11/12/02
Fluorene	13	17
Phenanthrene	3,6 J	ND

MWW01-SEN05				
Date	10/05/12	02/20/13	06/26/13	12/03/13
Benzene	6,1	6,6	4,2	5,7

MW-34-99		
Date	08/28/01	01/07/02
Benzene	7,3	9,3 [10]
Ethylbenzene	15	18 [20]
Vinyl Chloride	5,6	7,8 [8,8]
Naphthalene	NA	14 [12]

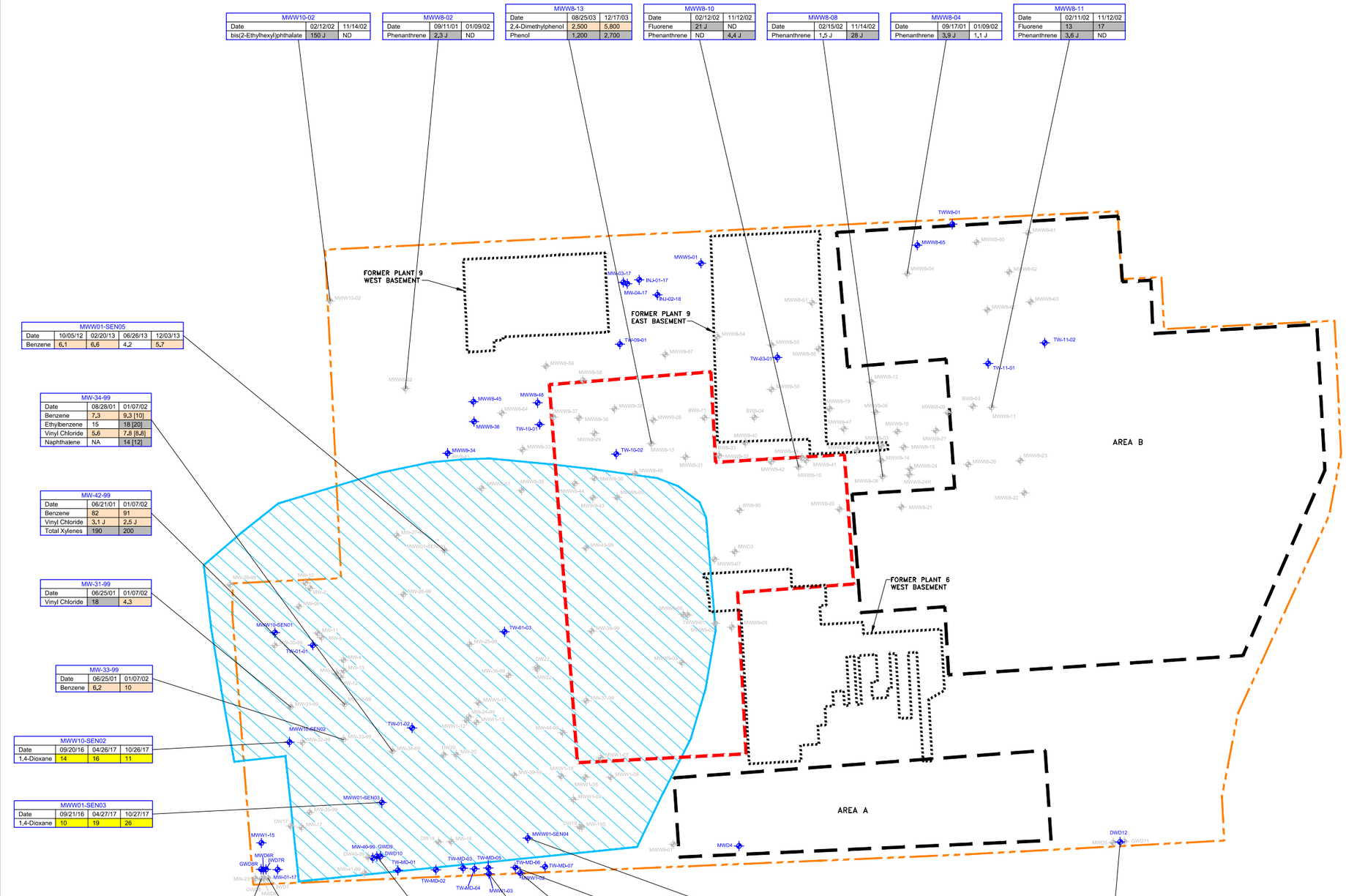
MW-42-99		
Date	06/21/01	01/07/02
Benzene	82	91
Vinyl Chloride	3,1 J	2,5 J
Total Xylenes	190	200

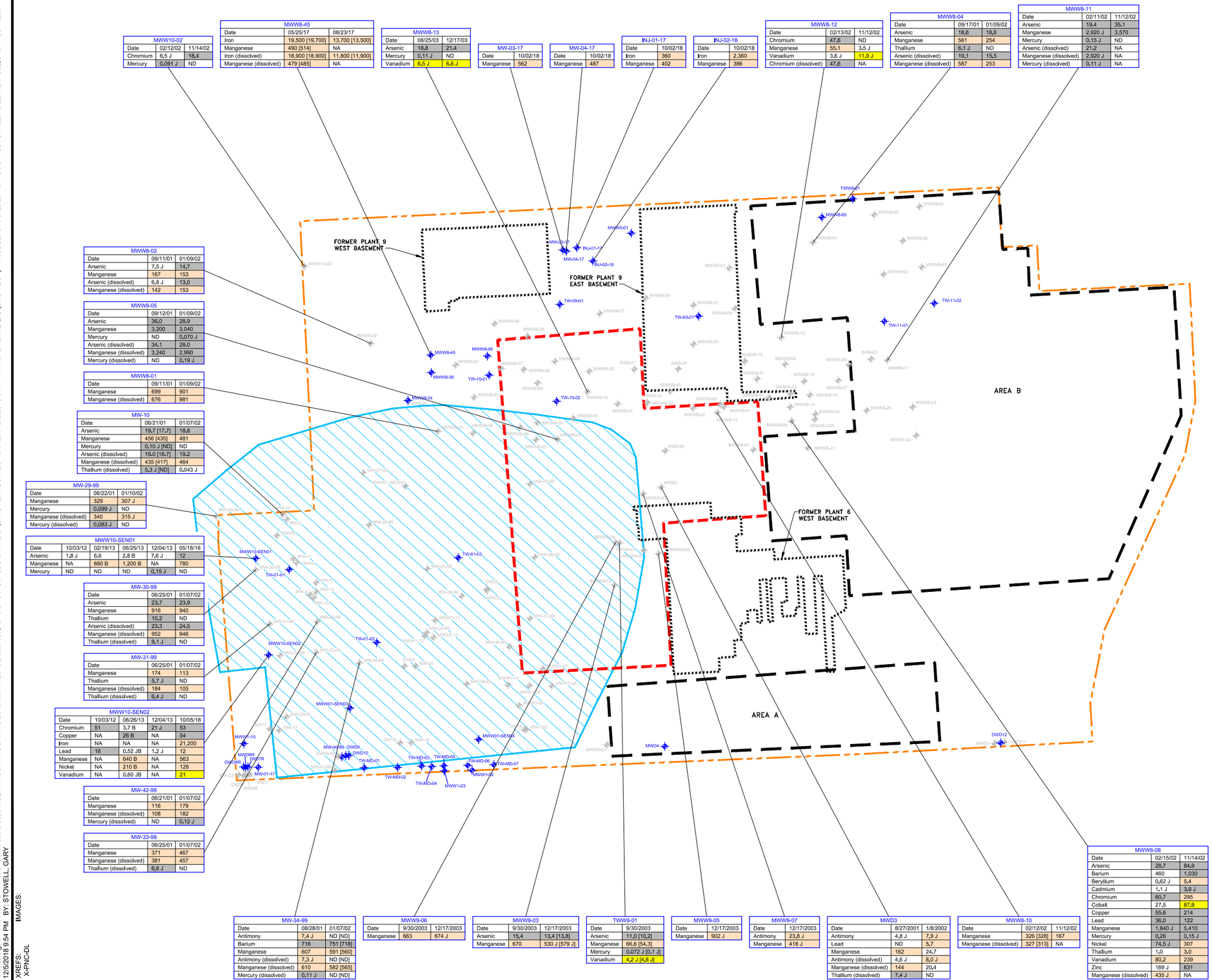
MW-31-99		
Date	06/25/01	01/07/02
Vinyl Chloride	18	4,3

MW-33-99		
Date	06/25/01	01/07/02
Benzene	6,2	10

MWW10-SEN02			
Date	09/20/16	04/26/17	10/26/17
1,4-Dioxane	14	16	11

MWW01-SEN03			
Date	09/21/16	04/27/17	10/27/17
1,4-Dioxane	10	19	26





MWW10-02		
Date	02/12/02	11/14/02
Chromium	6,5 J	18,4
Mercury	0,091 J	ND

MWW8-45		
Date	05/25/17	08/23/17
Iron	19,500 [19,700]	13,700 [13,500]
Manganese	490 [514]	NA
Iron (dissolved)	18,900 [18,900]	11,800 [11,900]
Manganese (dissolved)	479 [485]	NA

MWW8-13		
Date	08/25/03	12/17/03
Arsenic	18,8	21,4
Mercury	0,11 J	ND
Vanadium	6,5 J	6,6 J

MW-03-17		
Date	10/02/18	
Manganese	562	

MW-04-17		
Date	10/02/18	
Manganese	487	

INJ-01-17		
Date	10/02/18	
Iron	360	
Manganese	402	

INJ-02-18		
Date	10/02/18	
Iron	2,360	
Manganese	386	

MWW8-12		
Date	02/13/02	11/12/02
Chromium	47,6	ND
Manganese	55,1	3,5 J
Vanadium	3,6 J	11,9 J
Chromium (dissolved)	47,6	NA

MWW8-04		
Date	09/17/01	01/09/02
Arsenic	18,8	18,8
Manganese	561	254
Thallium	6,1 J	ND
Arsenic (dissolved)	19,1	15,5
Manganese (dissolved)	587	253

MWW8-11		
Date	02/11/02	11/12/02
Arsenic	19,4	35,1
Manganese	2,920 J	3,570
Mercury	0,15 J	ND
Arsenic (dissolved)	21,2	NA
Manganese (dissolved)	2,920 J	NA
Mercury (dissolved)	0,11 J	NA

MWW8-02		
Date	09/11/01	01/09/02
Arsenic	7,5 J	14,7
Manganese	167	153
Arsenic (dissolved)	6,8 J	13,0
Manganese (dissolved)	142	153

MWW8-05		
Date	09/12/01	01/09/02
Arsenic	36,0	28,9
Manganese	3,200	3,040
Mercury	ND	0,070 J
Arsenic (dissolved)	34,1	28,0
Manganese (dissolved)	3,240	2,990
Mercury (dissolved)	ND	0,19 J

MWW8-01		
Date	09/11/01	01/09/02
Manganese	699	901
Manganese (dissolved)	676	981

MW-10		
Date	06/21/01	01/07/02
Arsenic	19,7 [17,7]	18,8
Manganese	456 [435]	481
Mercury	0,10 J [ND]	ND
Arsenic (dissolved)	19,0 [18,7]	19,2
Manganese (dissolved)	435 [417]	464
Thallium (dissolved)	5,3 J [ND]	0,043 J

MW-29-99		
Date	06/22/01	01/10/02
Manganese	329	307 J
Mercury	0,099 J	ND
Manganese (dissolved)	340	315 J
Mercury (dissolved)	0,083 J	ND

MWW10-SEN01					
Date	10/03/12	02/19/13	06/25/13	12/04/13	05/18/16
Arsenic	1,8 J	6,6	2,8 B	7,6 J	12
Manganese	NA	880 B	1,200 B	NA	780
Mercury	ND	ND	ND	0,15 J	ND

MW-30-99		
Date	06/25/01	01/07/02
Arsenic	23,7	23,9
Manganese	916	940
Thallium	10,2	ND
Arsenic (dissolved)	23,3	24,5
Manganese (dissolved)	952	946
Thallium (dissolved)	9,1 J	ND

MW-31-99		
Date	06/25/01	01/07/02
Manganese	174	113
Thallium	5,7 J	ND
Manganese (dissolved)	184	105
Thallium (dissolved)	6,4 J	ND

MWW10-SEN02				
Date	10/03/12	06/26/13	12/04/13	10/05/18
Chromium	51	3,7 B	21 J	53
Copper	NA	26 B	NA	54
Iron	NA	NA	NA	21,200
Lead	16	0,52 JB	1,2 J	12
Manganese	NA	640 B	NA	563
Nickel	NA	210 B	NA	128
Vanadium	NA	0,60 JB	NA	21

MW-42-99		
Date	06/21/01	01/07/02
Manganese	116	179
Manganese (dissolved)	108	182
Mercury (dissolved)	ND	0,12 J

MW-33-99		
Date	06/25/01	01/07/02
Manganese	371	467
Manganese (dissolved)	381	457
Thallium (dissolved)	6,6 J	ND

MW-34-99		
Date	08/28/01	01/07/02
Antimony	7,4 J	ND [ND]
Barium	716	751 [718]
Manganese	607	591 [560]
Antimony (dissolved)	7,3 J	ND [ND]
Manganese (dissolved)	610	582 [565]
Mercury (dissolved)	0,11 J	ND [ND]

MWW9-06		
Date	9/30/2003	12/17/2003
Manganese	663	674 J

MWW9-03		
Date	9/30/2003	12/17/2003
Arsenic	15,4	13,4 [13,8]
Manganese	670	530 J [579 J]

TWW9-01	
Date	9/30/2003
Arsenic	11,0 [10,2]
Manganese	66,6 [54,3]
Mercury	0,072 J [0,1 J]
Vanadium	4,2 J [4,8 J]

MWW9-05		
Date	12/17/2003	
Antimony	23,8 J	
Manganese	418 J	

MWW9-07		
Date	12/17/2003	
Antimony	23,8 J	
Manganese	418 J	

MWD3		
Date	8/27/2001	1/8/2002
Antimony	4,8 J	7,9 J
Lead	ND	5,7
Manganese	162	24,7
Antimony (dissolved)	4,6 J	8,0 J
Manganese (dissolved)	144	20,4
Thallium (dissolved)	7,4 J	ND

MWW8-10		
Date	02/12/02	11/12/02
Manganese	326 [328]	167
Manganese (dissolved)	327 [313]	NA

MWW8-08		
Date	02/15/02	11/14/02
Arsenic	28,7	84,9
Barium	460	1,030
Beryllium	0,62 J	5,4
Cadmium	1,1 J	3,9 J
Chromium	60,7	295
Cobalt	27,5	87,9
Copper	55,6	214
Lead	36,0	122
Manganese	1,840 J	5,410
Mercury	0,26	0,15 J
Nickel	74,5 J	307
Thallium	1,0	3,0
Vanadium	80,2	239
Zinc	169 J	631
Manganese (dissolved)	435 J	NA

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. B – RESULT EXCEEDS THE METHOD OF DETECTION LIMIT AND/OR REPORTING LIMIT IN THE METHOD BLANK.
8. ^ – INSTRUMENT RELATED QUALITY CONTROL EXCEEDS THE CONTROL LIMITS.
9. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
   - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
   - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
   - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
   - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
   - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY INORGANICS EXCEEDANCES IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2C

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Reqd) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607.AD18\01-DWG\FIG2C-DATABOX.DWG LAYOUT: 2C SAVED: 12/5/2018 9:47 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/5/2018 9:54 PM BY: STOWELL, GARY
XREFS:
IMAGES:
X-PNC-DL

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Req) LYR:(Opt)ON=*;OFF=*REF*
C:\Users\gstowell\OneDrive - ARCADIS\BIM 360 Docs\RACER TRUST\RACER PNC 2018 ADMIN\2018\B0064607\AD18\01-DWG\FIG2D-DATABOX.DWG LAYOUT: 2D SAVED: 12/5/2018 9:49 PM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-LD2B-PDF-GMS PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 12/5/2018 9:55 PM BY: STOWELL, GARY
XREFS:
X-PNC-DL
IMAGES:

MWW1-03

Date	01/17/02	11/08/02	05/19/03	12/10/03	05/03/04	05/17/04	10/26/04	05/11/05	11/02/05	05/17/06	11/13/06	05/04/07	11/07/07	05/07/08	11/06/08	08/21/13
Antimony	ND	ND	ND	ND	ND	ND	ND	ND [ND]	ND	ND	ND [ND]	ND [ND]	10,2 J [2,7 J]	ND [ND]	ND [ND]	0,15 J
Arsenic	4,7 J	6,1 J	ND	ND	ND	ND	ND	3,2 J [3,2 J]	ND	2,0	2,0 [1,7 J]	1,0 J [1,4 J]	7,3 [5,4]	1,5 J [1,5 J]	4,0 [4,3]	12 B
Lead	ND	ND	ND	ND	ND	ND	ND	ND [ND]	18,1	4,4	ND [ND]	ND [ND]	2,9 J [ND]	ND [ND]	ND [ND]	0,30 JB
Manganese	427 J	429 J	494 J	1,320	873	740	568	725 [717]	675 J	737 J	741 J [724 J]	1,130 [1,130]	425 J [434 J]	324 J [296 J]	1,050 J [1,030 J]	990 B
Silver	ND	ND	ND	ND	ND	ND	ND	ND [ND]	ND	ND	ND [ND]	ND [ND]	ND [ND]	4,2 J [ND]	ND [ND]	ND
Arsenic (dissolved)	4,3 J	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	11 B
Manganese (dissolved)	433 J	NA	NA	NA	NA	739	NA	NA	NA	NA	NA	NA	NA	NA	NA	930 B

MWW1-02

Date	01/17/02	11/08/02	05/19/03	12/10/03	05/03/04	05/17/04	10/26/04	05/11/05	11/02/05	05/17/06	11/13/06	05/03/07	11/07/07	05/07/08	11/06/08	08/21/13
Arsenic	10,9	5,3 J	2,1 J	ND [ND]	ND [ND]	ND	ND [ND]	ND	ND [ND]	1,0 J [0,97 J]	ND	0,51 J	ND	0,81 J	1,6 J	12 B
Manganese	539 J	448 J	464 J	532 [486]	543 [548]	638	410 [419]	447	409 J [414 J]	376 J [400 J]	421 J	262	374	187 J	1,230 J	1,300 B
Mercury	0,12 J	ND	ND	ND [ND]	ND [ND]	ND	ND [ND]	ND	ND [ND]	ND [ND]	ND	ND	ND	ND	ND	ND
Arsenic (dissolved)	12,0	NA	NA	NA	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	12 B
Manganese (dissolved)	558 J	NA	NA	NA	NA	647	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,300 B

TW-MD-05

Date	07/30/14	02/18/15	04/01/15	05/20/15	04/24/17	05/25/17	10/03/18
Iron	NA	NA	NA	NA	13,900 [22,200]	12,600	11,500
Manganese	650	360	380	380	414 [807]	429	356
Mercury	ND	0,24	ND	ND	ND [ND]	NA	ND
Iron (dissolved)	8,600 B	15,000 B	16,000	15,000 B	13,200 [21,800]	12,400	NA
Manganese (dissolved)	720	390	400	390	419 [718]	423	NA

TW-MD-06

Date	08/01/14	02/25/15	04/01/15	05/20/15	04/24/17	05/25/17	08/17/17	10/04/18
Iron	NA	NA	NA	NA	21,200	17,200	22,100	24,900
Manganese	1,600	1,300 B	1,600	1,200	738	634	NA	947
Iron (dissolved)	11,000 B	13,000	12,000	12,000 B	21,600	17,000	21,500	NA
Manganese (dissolved)	1,600	1,300 B	1,500 ^	1,300	736	630	NA	NA
Mercury (dissolved)	NA	ND	ND	0,16 J	ND	NA	NA	NA

MW-19

Date	08/28/01	01/07/02
Arsenic	23,7	26,4
Manganese	246	409
Mercury	0,11 J	ND
Silver	1,5 J	ND
Antimony (dissolved)	7,9 J	ND
Arsenic (dissolved)	22,3	26,9
Manganese (dissolved)	278	463
Mercury (dissolved)	0,13 J	ND

MWW01-SEN05

Date	10/05/12	02/20/13	06/26/13	12/03/13
Barium	1,800 B	2,100 B	2,200 B	2,900 J
Lead	7,0	1,4 B	4,2 B	1,4 J
Manganese	NA	72 B	62 B	NA

MW-39-99

Date	08/28/01	01/10/02
Antimony	6,7 J	ND
Lead	6,6	19,9
Manganese	51,5	75,6 J
Manganese (dissolved)	47,2	79,1 J

TW-MD-07

Date	07/30/14	02/25/15	04/01/15	05/20/15	04/24/17	05/25/17	10/04/18
Iron	NA	NA	NA	NA	13,300	12,900	23,900
Manganese	220	210 B	430 [430]	190	257	134	201
Mercury	ND	ND	ND [ND]	0,22	ND	NA	ND
Iron (dissolved)	20,000 B	23,000	28,000 [28,000]	23,000 B	12,800	12,800	NA
Manganese (dissolved)	220	200 B	460 [460]	180	278	134	NA

TW-MD-04

Date	07/30/14	02/18/15	03/31/15	05/20/15	04/24/17	05/24/17	10/03/18
Iron	NA	NA	NA	NA	10,700	11,300	21,900
Manganese	1,300 [1,200]	600	600	560	353	341	1,160
Iron (dissolved)	6,300 B [6,700 B]	27,000 B	24,000	24,000 B	10,200	11,200	NA
Manganese (dissolved)	1,300 [1,300]	670	670 ^	580	369	345	NA

TW-MD-03

Date	07/29/14	02/18/15	03/31/15	05/20/15	05/25/17	10/03/18
Iron	NA	NA	NA	NA	9,490	18,000
Manganese	1,200	1,200 [1,100]	760	740	520	820
Iron (dissolved)	6,400 B	20,000 B [19,000 B]	17,000	15,000 B	9,160	NA
Manganese (dissolved)	1,200	980 [960]	740 ^	680	529	NA

MWW01-SEN03

Date	02/19/13	06/25/13	12/03/13	10/05/18
Chromium	23	12 B	8,5 J	29
Copper	18	13 B	NA	16
Iron	NA	NA	NA	21,100
Lead	6,4 B	7,5 B	3,4 J	11
Manganese	160 B	130 B	NA	477
Vanadium	3,9 J	2,4 JB	NA	7

IWD7R

Date	11/13/06	05/04/07	10/22/07	11/08/07	05/08/08	11/05/08
Arsenic	5,7	10,2	8,6	11,1	7,1	7,8
Chromium	ND	ND	NA	13,2	ND	ND
Manganese	66,1 J	42,7	NA	63,8 J	37,0 J	45,5 J

MWD6R

Date	11/13/06	05/04/07	11/08/07	05/08/08	11/05/08
Manganese	126 J	78,4	38,5 J	117 J	194 J

GWD8R

Date	11/13/06	05/03/07	11/08/07	05/09/08	11/05/08
Chromium	25,8	ND	6,2 J	4,2 J	ND
Manganese	93,6 J	55,8	52,7 J	39,0 J	37,4 J

GWD8

Date	09/14/01	01/10/02	05/21/03	12/12/03	05/05/04	10/26/04	05/11/05	11/02/05	05/17/06
Chromium	ND	3,8 J	2,3 J	21,4	4,1 J	ND	ND	4,5 J	4,1 J
Manganese	71,2	67,0 J	45,1	63,8 J	43,6	41,6	55,4	51,6 J	47,5 J
Manganese (dissolved)	70,3	64,1 J	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	0,072 J	ND	NA	NA	NA	NA	NA	NA	NA

MWD6

Date	09/11/01	01/09/02	11/13/02	05/21/03	12/12/03	05/05/04	05/17/04	10/26/04	05/11/05	11/02/05	05/17/06
Barium	532	166	220	1,090	66,1	2,030	1,520	56,2	495	58,0	66,3
Manganese	393	131	191 J	617	55,1 J	1,080	918	59,2	492	80,9 J	91,8 J
Mercury	ND	0,11 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium (dissolved)	520	157	NA	NA	NA	NA	1,500	NA	NA	NA	NA
Manganese (dissolved)	383	125	NA	NA	NA	NA	900	NA	NA	NA	NA

IWD7

Date	09/11/01	01/09/02	11/13/02	05/21/03	12/12/03	05/05/04	10/26/04	05/11/05	11/02/05	05/17/06
Lead	ND	13,5	ND	ND	ND	ND	ND	ND	ND	ND
Manganese	177	63,1	142 J	80,9	94,7 J	77,6	86,7	78,2	86,1 J	78,1 J
Vanadium	ND	4,9 J	ND	ND	ND	ND	ND	ND	21,0	8,8 J
Zinc	ND	592	ND	ND	ND	ND	ND	ND	ND	ND
Manganese (dissolved)	159	2,8 J	NA	NA	NA	NA	NA	NA	NA	NA

TW-MD-02

Date	07/29/14	02/11/15	03/31/15	05/20/15	05/24/17	08/17/17	10/03/18
Iron	NA	NA	NA	NA	14,000	14,400	14,300
Manganese	1,400	1,900	1,400	1,300	917	NA	747
Iron (dissolved)	14,000 B	17,000	16,000	15,000 B	13,500	14,200	NA
Manganese (dissolved)	1,300	1,700	1,300 ^	1,300	892	NA	NA

MWD5

Date	08/27/2001	1/8/2002
Chromium	ND	11,2
Manganese	382	16,5
Thallium	12,4	ND
Manganese (dissolved)	242	19,8
Thallium (dissolved)	5,3 J	0,038 J

DWD10

Date	01/22/02	11/12/02	05/19/03	12/11/03	05/03/04	10/26/04	05/11/05	11/02/05	05/17/06	11/13/06	05/02/07	11/07/07	05/07/08	11/06/08
Arsenic	ND	4,4 J	14,5 J	5,5 J	6,9 J	5,3 J	10,4	6,1 J	7,2	7,4	9,3	8,4	6,7	6,0

TW-MD-01

Date	07/30/14	02/11/15	03/31/15	05/20/15	05/24/17	10/03/18
Iron	NA	NA	NA	NA	7,220	10,800
Manganese	1,200	1,000	1,200	1,100 [1,200]	971	1,000
Iron (dissolved)	13,000 B	13,000	14,000	13,000 B [14,000 B]	6,890	NA
Manganese (dissolved)	1,200	990	1,100 ^	1,100 [1,200]	974	NA

DWD12

Date	01/18/02	11/12/02	05/20/03	12/17/03	05/04/04	10/27/04	05/13/05	11/04/05	05/18/06	11/10/06	05/04/07	11/09/07	05/08/08	11/06/08
Arsenic	31,2	39,5	36,4	41,3	41,3	38,4	39,6	40,9	39,1 [1,6 J]	36,2 J	39,4 [39,4]	34,4 [36,1]	36,3 [36,7]	33,4
Chromium	ND	8,4 J	4,7 J	6,8 J	7,4 J	2,7 J	10,8	2,6 J	16,0 [3,3 J]	1,9 J	ND [ND]	6,4 J [4,8 J]	ND [ND]	30,2
Manganese	ND	67,5	59,7 J	56,2 J	54,8	52,2	61,5	51,3	57,7 [13,8]	51,5 J	44,1 [47,6]	55,9 [53,3]	47,9 J [49,8 J]	98,9 J
Silver	ND	1,3 J	ND	ND	ND	ND	ND	ND	ND [ND]	ND	ND [ND]	ND [ND]	ND [ND]	ND
Arsenic (dissolved)	25,9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

MW-40-99

Date	01/10/02	11/12/02	05/19/03	12/11/03	05/03/04	05/17/04	10/26/04	05/11/05	11/02/05	05/17/06	11/13/06	05/02/07	11/07/07	05/07/08	11/06/08
Manganese	301 J	150	1,240 J [1,190 J]	727	651	589	255	351	221 J	311 J	240 J	287	210	112 J	435 J
Vanadium	ND	4,7 J	ND [ND]	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,0 J	ND
Manganese (dissolved)	280 J	NA	NA	NA	NA	579	NA	NA	NA	NA	NA	NA	NA	NA	NA

MWW9-01

Date	08/25/2003	12/17/2003	05/24/2004	11/1/2004	11/4/2005	05/19/2006	11/14/2006	05/3/2007	11/8/2007	05/8/2008
Arsenic	3,7 J	ND	4,1 J	ND	22,8	5,3	5,1	3	9,5	6,2
Chromium	56,8	15,5	6,7 J	ND	36,8	6,4 J	ND	6,2 J	7,4 J	ND
Copper	ND	ND	2,6 J	ND	18,8	6,8	ND	1,9 J	ND	ND
Lead	39,1	64,0	4	ND	78,4	8,0	ND	ND	ND	ND
Manganese	187 J	167 J	147 J	ND	336	180 J	71,6 J	20,7	143 J	74,7 J
Mercury	ND	ND	ND	0,039 J	0,11 J	ND	ND	ND	ND	ND
Vanadium	1,9 J	2,3 J	ND	ND	12,8	2,3 J	ND	ND	ND	ND
Manganese (dissolved)	NA	NA	156 J	NA	NA	NA	NA	NA	NA	NA

GWD11R

Date	05/04/07	11/9/2007	05/8/2008	11/6/2008
Arsenic	6,9	7,4	20,9	18,5 [18,7]
Chromium	5,4 J	21,7	6,2 J	ND [2,3 J]

GWD11

Date	01/29/02	11/12/02	05/20/03	12/17/03	05/04/04	10/27/04	05/12/05	11/04/05	05/18/06
Manganese	72,6	255	46,1 J	ND	27,8	78,8	137	39,9	13,8
Manganese (dissolved)	61,8	NA	NA	NA	NA	NA	NA	NA	NA

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
2. ALL CONCENTRATIONS ARE PRESENTED IN MICROGRAMS PER LITER (µg/L).
3. DUPLICATE ANALYSES ARE PRESENTED IN BRACKETS.
4. ND – CONSTITUENT NOT DETECTED.
5. NA – NOT ANALYZED.
6. J – ESTIMATED CONCENTRATION.
7. B – RESULT EXCEEDS THE METHOD OF DETECTION LIMIT AND/OR REPORTING LIMIT IN THE METHOD BLANK.
8. ^ – INSTRUMENT RELATED QUALITY CONTROL EXCEEDS THE CONTROL LIMITS.
9. SOIL WAS RELOCATED IN THE AREA OF INDUSTRIAL REDEVELOPMENT AS OUTLINED IN THE 2007 ENCORE NOTICE OF SOIL RELOCATION AND IS SPECIFIED AS FOLLOWS:
   - –FILL SOIL FROM THE FORMER PLANT 9 EAST BASEMENT WAS RELOCATED TO THE PRELOAD PILE
   - –THE TOP ONE FOOT OF SOIL ACROSS THE ENTIRE AIR (EXCLUDING FORMER A–1 FILL AREA) WAS RELOCATED TO THE PRELOAD PILE AND TO THE FORMER PLANT 9 EAST BASEMENT
   - –SOIL FROM 0–4 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA A TO THE PRELOAD PILE
   - –SOIL FROM 0 TO A MAXIMUM OF 7 FEET BELOW GRADE WAS RELOCATED FROM CUT AREA B TO THE PRELOAD PILE
   - –SOIL EXCAVATED FROM THE FORMER PLANT 6 BASEMENT WAS EITHER PLACED IN THE PRELOAD PILE, SHIPPED OFF–SITE, OR PLACED IN THE FORMER PLANT 8 BASEMENT.
   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

FORMER PLANT 9 WEST BASEMENT

FORMER PLANT 9 EAST BASEMENT

FORMER PLANT 6 WEST BASEMENT

AREA A

AREA B

0 125' 250'
GRAPHIC SCALE

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

**USPS PROPERTY
INORGANICS EXCEEDANCES IN GROUNDWATER**

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2D

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Req'd) LYR:(Opt)ON=*;OFF=*REF*
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MWW8-45	
Date	05/25/17
Total Dissolved Solids	752 [764]

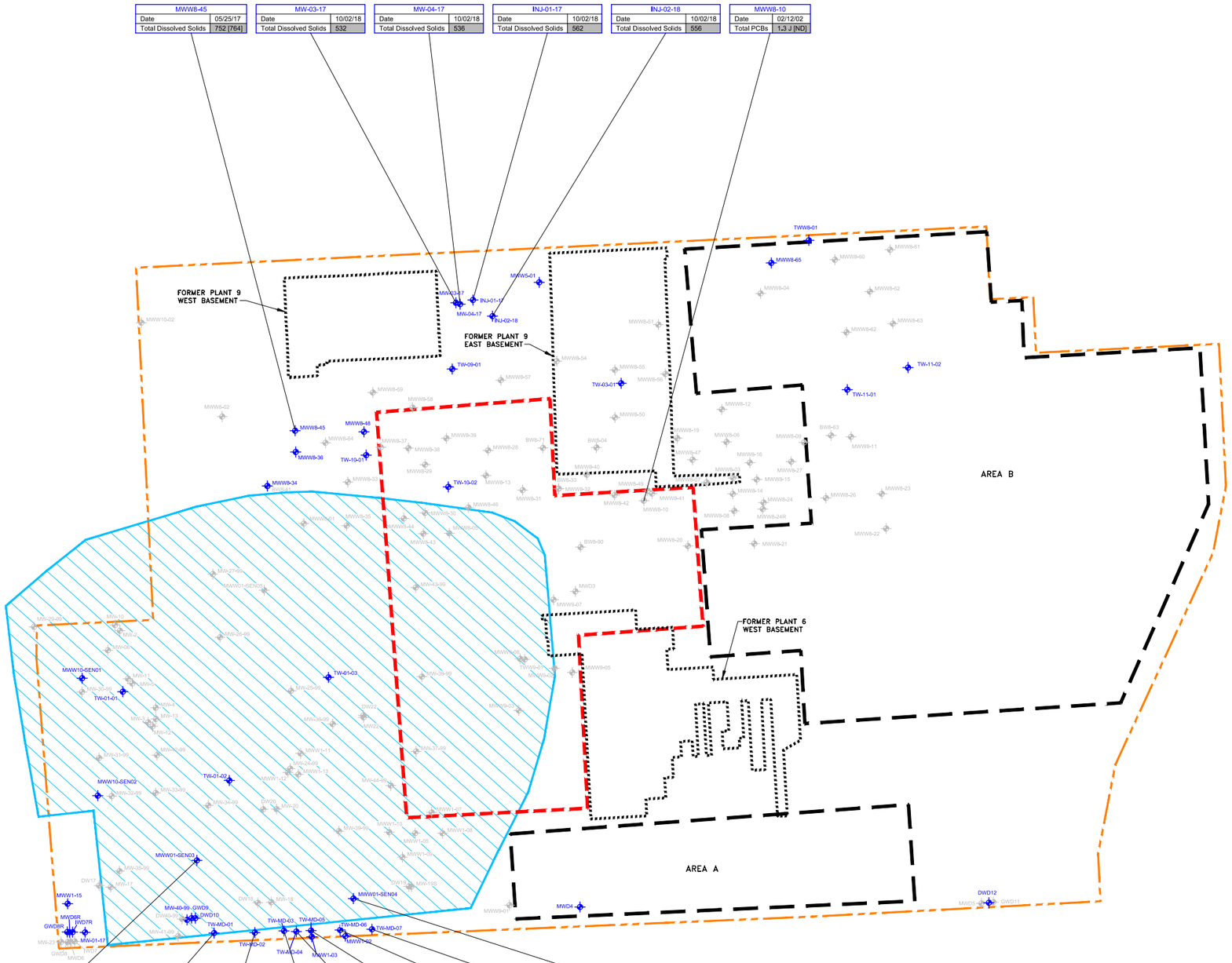
MW-03-17		
Date	10/02/18	
Total Dissolved Solids	532	

MW-04-17	
Date	10/02/18
Total Dissolved Solids	536

INJ-01-17	
Date	10/02/18
Total Dissolved Solids	562

INJ-02-18	
Date	10/02/18
Total Dissolved Solids	556

MWW8-10	
Date	02/12/02
Total PCBs	1.3 J [ND]



MWW01-SEN03	
Date	10/05/18
Total Dissolved Solids	1,110

TW-MD-01		
Date	05/24/17	10/03/18
Total Dissolved Solids	714	630

TW-MD-02			
Date	07/29/14	05/24/17	10/03/18
Total Dissolved Solids	680	678	620

TW-MD-03		
Date	05/25/17	10/03/18
Total Dissolved Solids	726	1,180

TW-MD-04		
Date	05/24/17	10/03/18
Total Dissolved Solids	728	1,700

TW-MD-05			
Date	07/30/14	05/25/17	10/03/18
Total Dissolved Solids	620	696	586

TW-MD-06			
Date	08/01/14	05/25/17	10/04/18
Total Dissolved Solids	910	1,138	1,080

TW-MD-07		
Date	05/25/17	10/04/18
Total Dissolved Solids	1,006	958

MWW01-SEN04	
Date	10/03/18
Total Dissolved Solids	580

LEGEND:

- EXISTING MONITORING WELL
- ABANDONED MONITORING WELL
- USPS (UNITED STATES POSTAL SERVICE) DISTRIBUTION CENTER PROPERTY BOUNDARY
- PRELOAD PILE
- APPROXIMATE CUT AREAS
- APPROXIMATE FORMER BASEMENT LOCATION
- FORMER FILL AREA A-1
- EXCEEDS MDEQ 2013 RESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 NONRESIDENTIAL DRINKING WATER CRITERIA
- EXCEEDS MDEQ 2013 GROUNDWATER SURFACE WATER INTERFACE CRITERIA

NOTES:

1. ALL SAMPLE LOCATIONS ARE APPROXIMATE.
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   - –PRELOAD PILE WAS GRADED THROUGHOUT AIR TO FINAL GRADE

0 125' 250'
GRAPHIC SCALE

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY TOTAL DISSOLVED SOLIDS EXCEEDANCES IN GROUNDWATER

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2E

Constituents	Units	MDEQ 2013 State Default Background Levels	Site Specific Background Criteria	MDEQ 2013 Residential Drinking Water Protection Criteria	MDEQ 2013 Nonresidential Drinking Water Protection Criteria	MDEQ 2013 Groundwater Surface Water Interface Protection Criteria	MDEQ 2013 Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	MDEQ 2013 Nonresidential Particulate Soil Inhalation Criteria	MDEQ 2013 Nonresidentail Infinite Source Volatile Soil Inhalation Criteria	MDEQ 2013 Nonresidential Direct Contact Criteria	MDEQ 2013 Soil Saturation Concentration Screening Levels
PCBs											
Total PCBs	ug/kg	- -	- -	- -	- -	- -	16,000,000	6,500,000	810,000	16,000	- -
Volatile Organics											
Benzene	ug/kg	- -	- -	100	100	4,000	8,400	470,000,000	45,000	840,000	400,000
1,2-Dibromo-3-chloropropane	ug/kg	- -	- -	10	10	- -	1,200	700,000	900	20,000	1,200
1,2-Dichlorobenzene	ug/kg	- -	- -	14,000	14,000	280	20,000,000	44,000,000,000	46,000,000	63,000,000	210,000
Dichloromethane	ug/kg	- -	- -	100	100	30,000	240,000	8,300,000,000	700,000	5,800,000	2,300,000
Ethylbenzene	ug/kg	- -	- -	1,500	1,500	360	460,000	13,000,000,000	2,400,000	71,000,000	140,000
Tetrachloroethene	ug/kg	- -	- -	100	100	1,200	21,000	1,200,000,000	210,000	930,000	88,000
Toluene	ug/kg	- -	- -	16,000	16,000	5,400	610,000	12,000,000,000	3,300,000	160,000,000	250,000
Trichloroethene	ug/kg	- -	- -	100	100	4,000	1,900	59,000,000	14,000	660,000	500,000
Total Xylenes	ug/kg	- -	- -	5,600	5,600	980	12,000,000	130,000,000,000	54,000,000	1,000,000,000	150,000
Semivolatile Organics											
2,4-Dimethylphenol	ug/kg	- -	- -	7,400	20,000	7,600	- -	2,100,000,000	- -	36,000,000	- -
2-Methylnaphthalene	ug/kg	- -	- -	57,000	170,000	4,200	4,900,000	290,000,000	1,800,000	26,000,000	- -
Acenaphthene	ug/kg	- -	- -	300,000	880,000	8,700	350,000,000	6,200,000,000	97,000,000	130,000,000	- -
Atrazine	ug/kg	- -	- -	60	60	150	- -	- -	- -	330,000	- -
Benzo(a)pyrene	ug/kg	- -	- -	- -	- -	- -	- -	1,900,000	- -	8,000	- -
Butylbenzylphthalate	ug/kg	- -	- -	2,200,000	5,000,000	120,000	- -	21,000,000,000	- -	120,000,000	310,000
Carbazole	ug/kg	- -	- -	9,400	39,000	1,100	- -	78,000,000	- -	2,400,000	- -
Dibenzofuran	ug/kg	- -	- -	- -	- -	1,700	3,600,000	2,900,000	160,000	- -	- -
Di-n-Butylphthalate	ug/kg	- -	- -	960,000	2,700,000	11,000	- -	1,500,000,000	- -	87,000,000	760,000
Fluoranthene	ug/kg	- -	- -	730,000	730,000	5,500	1,000,000,000	4,100,000,000	890,000,000	130,000,000	- -
Fluorene	ug/kg	- -	- -	390,000	890,000	5,300	1,000,000,000	4,100,000,000	150,000,000	87,000,000	- -
Phenanthrene	ug/kg	- -	- -	56,000	160,000	2,100	5,100,000	2,900,000	190,000	5,200,000	- -
Phenol	ug/kg	- -	- -	88,000	260,000	9,000	- -	18,000,000,000	- -	230,000,000	12,000,000
Naphthalene	ug/kg	- -	- -	35,000	100,000	730	470,000	88,000,000	350,000	52,000,000	- -
Inorganics											
Aluminum	mg/kg	6,900	- -	1.0	1.0	- -	- -	- -	- -	370,000	- -
Antimony	mg/kg	- -	- -	4.3	4.3	94	- -	5,900	- -	670	- -
Arsenic	mg/kg	5.8	8.05	4.6	4.6	4.6	- -	910	- -	37	- -
Barium	mg/kg	75	75	1,300	1,300	440	- -	150,000	- -	130,000	- -
Beryllium	mg/kg	- -	- -	51	51	84	- -	590	- -	1,600	- -
Cadmium	mg/kg	1.2	- -	6	6	3	- -	2,200	- -	2,100	- -
Chromium	mg/kg	- -	23.2	30	30	3.3	- -	240	- -	9,200	- -
Cobalt	mg/kg	6.8	11.8	0.8	2	2	- -	5,900	- -	9,000	- -
Copper	mg/kg	32	- -	5,800	5,800	73	- -	59,000	- -	73,000	- -
Cyanide (total)	mg/kg	0.39	- -	4	4	0.1	- -	250	- -	250	- -
Iron	mg/kg	12,000	- -	6	6	- -	- -	- -	- -	580,000	- -
Lead	mg/kg	21	33.2	700	700	2,500	- -	44,000	- -	900	- -
Manganese	mg/kg	440	631	1	1	26	- -	1,500	- -	90,000	- -
Magnesium	mg/kg	- -	- -	800	22,000	- -	- -	2,900,000	- -	1,000,000	- -
Mercury	mg/kg	0.13	- -	1.7	1.7	0.05	89	8,800	62	580	- -
Nickel	mg/kg	20	29	100	100	76	- -	16,000	- -	150,000	- -
Selenium	mg/kg	0.41	- -	4	4	0.4	- -	59,000	- -	9,600	- -
Silver	mg/kg	1	- -	4.5	13	0.1	- -	2,900	- -	9,000	- -
Thallium	mg/kg	- -	- -	2.3	2.3	4.2	- -	5,900	- -	130	- -
Vanadium	mg/kg	- -	27.7	72	990	430	- -	- -	- -	5,500	- -
Zinc	mg/kg	47	76.3	2,400	5,000	170	- -	- -	- -	630,000	- -

Constituents	Units	MDEQ 2013 Residential Drinking Water Criteria	MDEQ 2013 Non-Residential Drinking Water Criteria	MDEQ 2013 Groundwater Surface Water Interface Criteria	MDEQ 2013 Nonresidential Ground Water Volatilization to Indoor Air Inhalation Criteria	MDEQ 2013 Water Solubility	MDEQ 2013 Flammability and Explosivity Screening Level
PCBs							
Total PCBs	ug/L	0.5	0.5	0.2	45	44.7	- -
Volatile Organics							
Acetone	ug/L	730	2,100	1,700	1,000,000,000	1,000,000,000	15,000,000
Benzene	ug/L	5	5	200	35,000	1,750,000	68,000
Dichloromethane	ug/L	5	5	1,500	1,400,000	17,000,000	- -
1,4-Dioxane	ug/L	7.2	350	280	- -	900,000,000	140,000,000
Ethylbenzene	ug/L	74	74	18	170,000	169,000	43,000
Vinyl Chloride	ug/L	2	2	13	13,000	2,760,000	33,000
Total Xylenes	ug/L	280	280	49	190,000	186,000	70,000
Semivolatile Organics							
2,4-Dimethylphenol	ug/L	370	1,000	380	- -	7,870,000	- -
bis(2-Ethylhexyl)phthalate	ug/L	6	6	14	- -	340	- -
Fluorene	ug/L	880	2,000	12	2,000	1,980	- -
Phenanthrene	ug/L	52	150	2	1,000	1,000	- -
Phenol	ug/L	4,400	13,000	450	- -	82,800,000	- -
Naphthalene	ug/L	520	1,500	11	31,000	31,000	- -
Inorganics							
Antimony	ug/L	6	6	130	- -	- -	- -
Arsenic	ug/L	10	10	10	- -	- -	- -
Barium	ug/L	2,000	2,000	670	- -	- -	- -
Beryllium	ug/L	4	4	6.7	- -	- -	- -
Cadmium	ug/L	5	5	2.5	- -	- -	- -
Chromium	ug/L	100	100	11	- -	- -	- -
Cobalt	ug/L	40	100	100	- -	- -	- -
Copper	ug/L	1,000	1,000	13	- -	- -	- -
Iron	ug/L	300	300	- -	- -	- -	- -
Lead	ug/L	4	4	14	- -	- -	- -
Manganese	ug/L	50	50	1,300	- -	- -	- -
Mercury	ug/L	2	2	0.0013	56	56	- -
Nickel	ug/L	100	100	73	- -	- -	- -
Silver	ug/L	34	98	0.2	- -	- -	- -
Thallium	ug/L	2	2	3.7	- -	- -	- -
Vanadium	ug/L	4.5	62	27	- -	- -	- -
Zinc	ug/L	2,400	5,000	170	- -	- -	- -
Miscellaneous							
Total Dissolved Solids	mg/L	500	500	500	- -	- -	- -

Notes:

1. Groundwater Surface Water Interface Criteria listed for barium, beryllium, cadmium, chromium, copper, lead, manganese, nickel and zinc are calculated based on a hardness of 150 mg/L-CaCO3 for southern Lower Peninsula waters protected as a drinking water source.

DRAFT

RACER TRUST
PONTIAC, MICHIGAN
PONTIAC NORTH CAMPUS

USPS PROPERTY
CRITERIA TABLES 2013 CRITERIA

ARCADIS Design & Consultancy for natural and built assets

FIGURE
2F

CITY: SYRACUSE DIV/GROUP: IMDV DB: A.FOX G.STOWELL PM:(Reqd) LYR:(Opt)ON=*;OFF=*REF*
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X-PNC-DL
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TABLES



DRAFT

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS (ug/kg)
(M59/Adams Site)

Soil Part 201 Generic Residential/Commercial I Cleanup Criteria Revised January 23, 2006 Units: ug/kg	MDEQ SOIL TARGET DETECTION LIMITS		Groundwater Protection			Direct Contact	Sample ID													
		Statewide Default Background Levels	Drinking Water Protection Criteria & RBSLs (Residential/Commercial)	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	Direct Contact Criteria & RBSLs (Residential/Comm I & II)	W152-060918-015	W152-060919-025	W152-060921-015	W152-060922-015	W152-060928-015	W152-060928-025	W152-060928-015	W152-061007-015	W152-061009-015	W152-061010-015	W152-061014-015	W152-061014-025	W152-061016-015	W152-061016-025	W152-061016-035
							9/19/2006	9/19/2006	9/21/2006	9/22/2006	9/28/2006	9/28/2006	9/29/2006	10/7/2006	10/9/2006	10/10/2006	10/14/2006	10/14/2006	10/16/2006	10/16/2005	10/16/2006
VOLATILE ORGANIC COMPOUNDS																					
Acetone	1,000	NA	15,000/42,000	34,000	1.1E+08	2.3E+7/7.3E+7	870	850	820	830	730	690	860	960	940	1000	940	900	850	890	880
Dichloromethane	100	NA	100/100	19,000 (X)	2.3E+05	1.2E+6/2.3E+6(C)	53	47	69	63	84	75	100	110	100	110	65	70	81	75	70
Ethylbenzene	100	NA	1,500/1,500	360	1.4E+5(C)	1.4E+5(C)/1.4E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	100	NA	NA	NA	NA	NA/NA	BDL	53	99	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	1,000	NA	16,000/16,000	2,800	2.5E+05	2.5E+5/2.5E+5(C)	BDL	24	340	24	BDL	BDL	BDL	BDL	22	BDL	31	59	21	38	BDL
1,2,4-Trimethylbenzene	100	NA	2,100/2,100	570	1.1E+5(C)	1.1E+5(C)/1.1E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-Xylenes	100	NA	5,600/5,600	700	1.5E+5(C)	1.5E+5(C)/1.5E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SEMI-VOLATILE ORGANIC COMPOUNDS																					
Anthracene	330	NA	41,000/41,000	ID	41,000	2.3E+8/7.3E+8	BDL	BDL	BDL	31	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benz(a)anthracene	330	NA	NLL	NLL	NLL	20,000/80,000	BDL	BDL	BDL	58	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(a)pyrene	330	NA	NLL	NLL	NLL	2,000/8,000	BDL	BDL	BDL	43	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(b)fluoranthene	330	NA	NLL	NLL	NLL	20,000/80,000	BDL	BDL	BDL	39	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chrysene	330	NA	NLL	NLL	NLL	2.0E+6/8.0E+6	BDL	BDL	BDL	47	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Di-n-butyl phthalate	330	NA	7.6E+5/7.6E+5 (C)	11,000	7.6E+5	7.6E+5(C)/7.6E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluoranthene	330	NA	7.3E+5	5,500	7.3E+5	4.6E+7/1.3E+8	BDL	BDL	BDL	110	BDL	BDL	62	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
3/4 Methylphenol	330	NA	7,400/20,000	1,400	1.6E+7	1.1E+7/3.6E+7	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	59	76	120	BDL	BDL	BDL
Naphthalene	330	NA	35,000/1.0E+5	870	0	1.6E+7/5.2E+7	BDL	BDL	BDL	140	BDL	BDL	250	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Phenanthrene	330	NA	56,000/1.6E+5	5,300	1.1E+6	1.6E+6/5.2E+6	BDL	BDL	BDL	110	BDL	BDL	62	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Phenol	330	NA	88,000/2.6E+5	4,200	1.2E+7(C)	1.2E+7(C,DD)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Pyrene	330	NA	4.6E+5/4.6E+5	ID	4.6E+5	2.9E+7/8.4E+7	BDL	BDL	BDL	95	BDL	BDL	46	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
METALS																					
Arsenic	100	5,800	4,600/4,600	70,000 (X)	2.0E+6	7,600/37,000	4,700	4,000	3,900	4,000	4,100	3,900	4,200	3,200	3,700	1,800	3,200	3,500	3,300	3,400	3,100
Barium	1,000	75,000	1.3E+6/1.3E+6	(G,X)*	1.0E+9 (D)	3.7E+7/1.3E+8	25,000	30,000	26,000	30,000	31,000	34,000	29,000	26,000	25,000	13,000	26,000	27,000	26,000	28,000	27,000
Cadmium	200	1,200	6,000/6,000	(G,X)*	2.0E+8	5.5E+5/2.1E+6	430	340	320	350	280	350	320	300	92	240	280	290	320	320	280
Chromium	2,000	18,000	1.0E+9/1.0E+9 (D)	(G,X)*	1.0E+8 (D)	7.9E+8/1.0E+9(D)	11,000	10,000	7,800	8,300	10,000	10,000	8,000	6,800	7,600	4,700	7,600	8,100	8,100	8,700	9,200
Copper	1,000	32,000	5.8E+6/5.8E+6	(G)*	1.0E+9 (D)	2.0E+7/7.3E+7	14,000	14,000	13,000	13,000	13,000	14,000	13,000	8,900	11,000	2,700	7,100	9,500	8,200	9,300	7,800
Lead	1,000	21,000	7.0E+5/7.0E+5	(G,X)*	ID	4.0E+5/9.0E+5(DD)	7,700	10,000	7,900	10,000	9,300	11,000	12,000	11,000	9,300	4,200	8,400	11,000	8,300	8,500	8,900
Manganese	1,000	440,000	1,000/1,000	(G,X)*	1.8E+8	2.5E+7/9.0E+7	250,000	220,000	300,000	250,000	260,000	320,000	270,000	310,000	230,000	87,000	280,000	190,000	290,000	300,000	290,000
Mercury	50	130	1,700/1,700	50 (M),1.2	47,000	1.6E+5/5.8E+5	21	22	23	130	25	24	21	21	20	18	15	16	16	18	15
Selenium	200	410	4,000/4,000	400	7.8E+7	2.6E+6/9.6E+6	260	350	360	310	360	450	280	260	370	<180	310	380	200	180	310
Silver	100	1,000	4,500/13,000	100(M);27	2.0E+8	2.5E+6/9.0E+6	120	210	87	77	360	350	290	170	110	<92	50	63	50	51	48
Zinc	1,000	47,000	2.4E+6/5.0E+6	(G)*	1.0E+9 (D)	1.7E+8/6.3E+8	40,000	34,000	31,000	32,000	33,000	37,000	54,000	39,000	34,000	14,000	30,000	36,000	28,000	31,000	28,000

*Calculation of Generic Facility-Specific Part 201
Groundwater Surface Water Interface (GSI) Criteria for (G) Footnoted Hazardous Substances

CONSTITUENT	Soil GSI PC (ug/kg)
Barium	1.2E+06
Cadmium	3,900
Chromium (III)	3.5E+09
Copper	4.6E+06
Lead	2.5E+06
Manganese	72,000
Zinc	4.5E+06

Criteria utilize MDEQ footnotes from Op Memo #2, dated 1/23/06
BDL = Below Detection Limit

Se sample results (ug/kg) from initial 12 fill samples and 4 topsoil samples (BDL use 1/2 RL)
250, 210, 360, 95, 130, 770, 360, 100, 105, 105, 95, 80, 270, 170, 105, 120
Onsite sample results (ug/kg) (BDL use 1/2 RL)
260, 350, 360, 310, 360, 450, 280, 260, 370, 90, 310, 380, 200, 180, 310, 400, 320, 480, 490, 340, 220
390, 330, 220, 180, 320, 170, 190, 330, 87, 110, 210, 240, 140, 160, 170, 150, 230

UCL for 12 + 4 source area plus 38 onsite samples

x	sd	t
253	132.26	1.67

UCL= 283.57
CV= 0.52

As sample results (ug/kg) from initial 12 fill samples and 4 topsoil samples
5,600, 5,200, 4,900, 3,300, 5,400, 3,400, 5,100, 4,900, 4,400, 4,900, 3,600, 4,400, 4,200, 4,000, 4,600, 4,400
Onsite sample results (ug/kg)
4,700, 4,000, 3,900, 4,000, 4,100, 3,900, 4,200, 3,200, 3,700, 1,800, 3,200, 3,500, 3,300, 3,400, 3,100, 3,700, 4,400, 4,300
3,900, 5,300, 3,900, 4,200, 3,600, 3,400, 4,100, 4,000, 3,800, 3,200, 5,300, 4,500, 4,200, 5,100,7,300, 4,500, 5,300, 3,900,
5,200, 6,500

UCL for 12 + 4 source area plus 38 onsite samples

x	sd	t
4,261	904.79	1.67

UCL= 4,467.24
CV= 0.21

DRAFT

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS (ug/kg)
(M59/Adams Site)

Soil Part 201 Generic Residential/Commercial I Cleanup Criteria Revised January 23, 2006 Units: ug/kg	MDEQ SOIL TARGET DETECTION LIMITS		Groundwater Protection			W152-061020-015	W152-061021-015	W152-061026-015	W152-061025-025	W152-061027-015	W152-061027-025	W152-061030-015	W152-061030-025	W152-061030-035	W152-061030-045	W152-061031-015	W152-061031-025	W152-061101-015	W152-061101-025	W152-061102-015	W152-061102-025	W152-061103-015	W152-061103-025	W152-061104-015
		Statewide Default Background Level	Drinking Water Protection Criteria & RRAs (Residential/Commercial)	Groundwater Surface Water Interface Protection Criteria & RRAs	Groundwater Contact Protection Criteria & RRAs	10/20/2006	10/21/2006	10/26/2006	10/26/2006	10/27/2006	10/27/2006	10/30/2006	10/30/2006	10/30/2006	10/30/2006	10/31/2006	10/31/2006	11/1/2006	11/1/2006	11/2/2006	11/2/2006	11/3/2006	11/3/2006	11/4/2006
VOLATILE ORGANIC COMPOUNDS																								
Acetone	1,000	NA	15,000/42,000	34,000	1.1E+08	580	560	430	410	430	470	430	430	450	430	440	410	560	750	150	650	530	780	700
Dichloromethane	100	NA	100/100	19,000 (X)	2.3E+06	74	70	42	57	51	50	49	56	47	45	54	49	61	79	200	47	70	140	110
Ethylbenzene	100	NA	1,500/1,500	360	1.4E+5(C)	18	BDL	BDL	BDL	18	BDL	BDL	BDL	BDL	BDL	BDL	BDL	17	BDL	BDL	BDL	BDL	BDL	BDL
p-Isopropyltoluene	100	NA	NA	NA	NA	BDL	34	56	45	69	BDL	BDL	BDL	BDL	BDL	BDL	BDL	37	BDL	BDL	BDL	BDL	BDL	BDL
Toluene	1,000	NA	16,000/16,000	2,800	2.5E+05	710	25	29	36	34	BDL	49	25	38	BDL	BDL	27	410	40	BDL	BDL	BDL	BDL	BDL
1,2,4-Trimethylbenzene	100	NA	2,100/2,100	570	1.1E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	23	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
m,p-Xylenes	100	NA	5,600/5,600	700	1.5E+5(C)	BDL	BDL	BDL	BDL	BDL	BDL	40	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
SEMI-VOLATILE ORGANIC COMPOUNDS																								
Anthracene	330	NA	41,000/41,000	ID	41,000	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benz(a)anthracene	330	NA	NLL	NLL	NLL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(a)pyrene	330	NA	NLL	NLL	NLL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Benzo(b)fluoranthene	330	NA	NLL	NLL	NLL	BDL	BDL	110	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Chrysene	330	NA	NLL	NLL	NLL	BDL	BDL	160	78	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	84	BDL	BDL	BDL
Di-n-butyl phthalate	330	NA	7.6E+5/7.6E+5 (C)	11,000	7.6E+5	BDL	BDL	120	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Fluoranthene	330	NA	7.3E+5	5,500	7.3E+5	BDL	BDL	350	180	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	210	BDL	BDL	BDL
3/4 Methylphenol	330	NA	7,400/20,000	1,400	1.6E+7	140	110	160	130	140	110	BDL	BDL	250	BDL	BDL	BDL	430	BDL	BDL	BDL	BDL	BDL	BDL
Naphthalene	330	NA	35,000/1.0E+5	870	0	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Phenanthrene	330	NA	56,000/1.6E+5	5,300	1.1E+6	BDL	BDL	140	72	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	130	BDL	BDL	BDL
Phenol	330	NA	88,000/2.6E+5	4,200	1.2E+7(C)	BDL	BDL	160	52	BDL	BDL	BDL	59	BDL	BDL	BDL	BDL	110	BDL	130	BDL	BDL	BDL	BDL
Pyrene	330	NA	4.8E+5/4.8E+5	ID	4.8E+5	BDL	BDL	290	180	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	170	BDL	BDL	BDL
METALS																								
Arsenic	100	5,800	4,600/4,600	76,000 (X)	2.0E+6	3,700	4,400	4,300	3,900	5,300	3,900	4,200	3,600	3,400	4,100	4,000	3,800	3,200	5,300	4,500	4,200	5,100	7,300	4,500
Barium	1,000	75,000	1.3E+6/1.3E+6	(G,X)*	1.0E+8 (D)	36,000	24,000	20,000	19,000	33,000	28,000	24,000	28,000	31,000	29,000	28,000	29,000	25,000	44,000	34,000	35,000	35,000	54,000	38,000
Cadmium	200	1,200	6,000/6,000	(G,X)*	2.3E+8	370	340	310	320	350	300	350	350	320	390	360	340	250	460	400	340	340	630	340
Chromium	2,000	18,000	1.0E+9/1.0E+9 (D)	(G,X)*	1.0E+9 (D)	12,000	9,700	8,300	7,600	11,000	8,500	9,300	9,600	9,600	10,000	9,100	9,900	8,100	12,000	11,000	9,600	11,000	17,000	12,000
Copper	1,000	32,000	5.8E+6/5.8E+6	(G)*	1.0E+9 (D)	8,500	13,000	10,000	9,560	11,000	8,500	15,000	19,000	17,000	14,000	17,000	16,000	14,000	22,000	16,000	16,000	11,000	15,000	11,000
Lead	1,000	21,000	7.0E+5/7.0E+5	(G,X)*	ID	13,000	8,300	8,800	9,160	9,690	8,600	8,400	9,700	10,000	8,800	9,100	8,300	9,100	13,000	9,400	9,500	11,000	15,000	11,000
Manganese	1,000	440,000	1,300/1,000	(G,X)*	1.8E+8	250,000	230,000	200,000	200,000	310,000	220,000	230,000	240,000	210,000	240,000	210,000	240,000	190,000	350,000	270,000	290,000	340,000	450,000	280,000
Mercury	50	130	1,700/1,700	50 (M),*,2	47,000	23	19	23	14	21	18	26	29	22	22	19	24	35	66	30	30	29	36	24
Selenium	200	410	4,000/4,000	400	7.8E+7	460	320	480	490	340	220	390	330	220	180	320	170	190	330	97	<220	210	240	140
Silver	100	1,000	4,500/13,000	100(M),27	2.0E+8	65	120	72	63	90	91	250	170	40	45	50	44	46	95	50	46	73	110	56
Zinc	1,000	47,000	2.4E+6/5.0E+6	(G)*	1.0E+9 (D)	39,000	30,000	30,000	32,000	37,000	32,000	43,000	38,000	40,000	44,000	48,000	42,000	40,000	52,000	36,000	36,000	33,000	54,000	34,000

*Calculation of Generic Facility-Specific Part 201 Groundwater Surface Water Interface (GSI) Criteria for (G) Footnoted Hazardous Substances

CONSTITUENT	Soil GSI PC (ug/kg)
Barium	1.2E+06
Cadmium	3,600
Chromium (III)	3.5E+09
Copper	4.6E+06
Lead	2.5E+06
Manganese	72,000
Zinc	4.5E+06

Criteria utilize MDEQ footnotes from Op Memo #2, dated 1/27
BDL = Below Detection Limit

Mn sample results (ug/kg) from initial 12 fill samples and 4 topsoil samples
370,000, 180,000, 230,000, 300,000, 440,000, 240,000, 230,000, 240,000, 230,000, 240,000, 220,000, 200,000, 200,000, 230,000, 260,000, 240,000
Onsite sample results (ug/kg)
250,000, 220,000, 300,000, 250,000, 260,000, 320,000, 270,000, 310,000, 230,000, 87,000, 290,000, 190,000, 290,000, 300,000, 200,000, 250,000, 230,000
200,000, 200,000, 310,000, 220,000, 230,000, 240,000, 210,000, 240,000, 210,000, 240,000, 180,000, 350,000, 270,000, 280,000, 340,000,
450,000, 260,000, 280,000, 250,000, 300,000, 400,000
UCL for 12 + 4 source area plus 38 onsite samples

x	sd	t
259,204	63,956.76	1.67

UCL= 273,774.23
CV= 0.25

DRAFT

SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS (ug/kg)
(M59/Adams Site)

Soil Part 201 Generic Residential/Commercial I Cleanup Criteria Revised January 23, 2006 Units: ug/kg	MDEQ SOIL TARGET DETECTION LIMITS		Groundwater Protection			W152-061104-025	W152-061104-035	W152-061106-015	W152-061106-025
		Statewide Default Background Levels	Drinking Water Protection Criteria & RBSLs (Residential/Commercial)	Groundwater Surface Water Interface Protection Criteria & RBSLs	Groundwater Contact Protection Criteria & RBSLs	11/4/2006	11/4/2006	11/6/2006	11/6/2006
VOLATILE ORGANIC COMPOUNDS									
Acetone	1,000	NA	15,000/42,000	34,000	1.1E+08	BDL	550	BDL	1,100
Dichloromethane	100	NA	100/100	19,000 (X)	2.3E+06	52	56	160	100
Ethylbenzene	100	NA	1,500/1,500	360	1.4E+5(C)	BDL	BDL	BDL	BDL
p-Isopropyltoluene	100	NA	NA	NA	NA	BDL	BDL	BDL	46
Toluene	1,000	NA	16,000/16,000	2,800	2.5E+05	BDL	32	24	32
1,2,4-Trimethylbenzene	100	NA	2,100/2,100	570	1.1E+5(C)	BDL	BDL	BDL	BDL
m,p-Xylenes	100	NA	5,600/5,600	700	1.5E+5(C)	BDL	BDL	BDL	BDL
SEMI-VOLATILE ORGANIC COMPOUNDS									
Anthracene	330	NA	41,000/41,000	ID	41,000	BDL	BDL	BDL	BDL
Benz(a)anthracene	330	NA	NLL	NLL	NLL	BDL	BDL	BDL	BDL
Benzo(a)pyrene	330	NA	NLL	NLL	NLL	BDL	BDL	BDL	BDL
Benzo(b)fluoranthene	330	NA	NLL	NLL	NLL	BDL	BDL	BDL	BDL
Chrysene	330	NA	NLL	NLL	NLL	BDL	91	BDL	BDL
Di-n-butyl phthalate	330	NA	7.6E+5/7.6E+5 (C)	11,000	7.6E+5	BDL	BDL	BDL	BDL
Fluoranthene	330	NA	7.3E+5	5,500	7.3E+5	BDL	110	BDL	BDL
3/4 Methylphenol	330	NA	7,400/20,000	1,400	1.6E+7	BDL	BDL	BDL	BDL
Naphthalene	330	NA	35,000/1.0E+5	870	0	BDL	BDL	BDL	BDL
Phenanthrene	330	NA	56,000/1.5E+5	5,300	1.1E+6	76	BDL	BDL	BDL
Phenol	330	NA	88,000/2.8E+5	4,200	1.2E+7(C)	BDL	BDL	BDL	BDL
Pyrene	330	NA	4.8E+5/4.8E+5	ID	4.8E+5	110	130	BDL	BDL
METALS									
Arsenic	100	5,800	4,600/4,600	70,000 (X)	2.0E+6	5,360	3,900	5,200	6,500
Barium	1,000	75,000	1.3E+6/1.3E+6	(G,X)*	1.0E+9 (D)	46,000	32,000	36,000	55,000
Cadmium	200	1,200	6,000/6,000	(G,X)*	2.3E+8	360	300	390	560
Chromium	2,000	18,000	1.0E+9/1.0E+9 (D)	(G,X)*	1.0E+9 (D)	11,000	8,600	12,000	16,000
Copper	1,000	32,000	5.8E+6/5.8E+6	(G)*	1.0E+9 (D)	12,000	8,300	12,000	17,000
Lead	1,000	21,000	7.0E+5/7.0E+5	(G,X)*	ID	11,000	9,600	12,000	16,000
Manganese	1,000	440,000	1,000/1,000	(G,X)*	1.8E+8	280,000	250,000	300,000	400,000
Mercury	50	130	1,700/1,700	50 (M);1.2	47,000	25	26	28	34
Selenium	200	410	4,000/4,000	400	7.8E+7	160	170	150	230
Silver	100	1,000	4,500/13,000	100(M);27	2.0E+8	56	41	55	73
Zinc	1,000	47,000	2.4E+6/5.0E+6	(G)*	1.0E+9 (D)	38,000	30,000	39,000	54,000

*Calculation of Generic Facility-Specific Part 201
Groundwater Surface Water Interface (GSI) Criteria for (G) Footnoted Hazardous Substances

CONSTITUENT	Soil GSI PC (ug/kg)
Barium	1.2E+06
Cadmium	3,600
Chromium (III)	3.5E+09
Copper	4.6E+06
Lead	2.5E+06
Manganese	72,000
Zinc	4.5E+06

Criteria utilize MDEQ footnotes from Op Memo #2, dated 1/23

BDL = Below Detection Limit

Other Inorganic Soil
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Location ID: Sample Depth(ft): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	INJ-01-17 16 - 17 10/17/17 INJ-01-17_(16-17) (10-17-2017)	INJ-01-17 20 - 21 10/17/17 INJ-01-17_(20-21) (10-17-2017)
Detected Inorganics												
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	910	- -	- -	4.03	2.52
Barium	75	75	130,000	1,300	1,300	440	- -	150,000	- -	- -	34.7	15.1
Beryllium	- -	- -	1,600	51	51	84	- -	590	- -	- -	0.26	0.20 U
Cadmium	- -	1.2	2,100	6	6	3	- -	2,200	- -	- -	0.22	0.20 U
Chromium	23.2	- -	9,200	30	30	3.3	- -	240	- -	- -	8.44	3.23
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	5,900	- -	- -	7.82	1.79
Copper	- -	32	73,000	5,800	5,800	73	- -	59,000	- -	- -	14.9	5.28
Lead	33.2	21	900	700	700	2,500	- -	44,000	- -	- -	7.84	3.30
Manganese	631	440	90,000	1	1	26	- -	1,500	- -	- -	361	563
Nickel	29	20	150,000	100	100	76	- -	16,000	- -	- -	17.0	6.99
Selenium	- -	0.41	9,600	4	4	0.4	- -	59,000	- -	- -	0.91	0.40 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	12.3	4.08
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	34.9	9.92

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria

Other Misc. Soil
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Location ID: Sample Depth(ft): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	INJ-01-17 16 - 17 10/17/17 INJ-01-17_(16-17) (10-17-2017)	INJ-01-17 20 - 21 10/17/17 INJ-01-17_(20-21) (10-17-2017)
Detected Miscellaneous													
Total Solids	--	--	--	--	--	--	--	--	--	--	%	82	93

Abbreviations:

--	Information is not available.
%	Percent
CSAT	Soil Saturation Concentration Screening Level
ft	feet
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
R	Rejected data
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria

Other PCB Soil
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Location ID: Sample Depth(ft): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	INJ-01-17 16 - 17 10/17/17 INJ-01-17_(16-17) (10-17-2017)	INJ-01-17 20 - 21 10/17/17 INJ-01-17_(20-21) (10-17-2017)
Detected PCBs													
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft	feet
GSWI	Groundwater Surface Water Interface
ID	Identification
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Other VOC-SVOC Soil
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ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	INJ-01-17 16 - 17 10/17/17 INJ-01-17_(16-17) (10-17-2017)	INJ-01-17 20 - 21 10/17/17 INJ-01-17_(20-21) (10-17-2017)
Detected Volatile Organics													
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
Detected Semivolatile Organics													
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft	feet
GSWI	Groundwater Surface Water Interface
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
ID	Identification
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Soil SB Analytical PCB Memos
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ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Depth(ft): / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-01-14 06/02/14 4 - 5 SB-01-14 (4-5)	SB-01-14 06/02/14 6 - 7 SB-01-14 (6-7)	SB-01-14 06/02/14 14 - 15 SB-01-14 (14-15)	SB-01-14 06/02/14 16 - 17 SB-01-14 (16-17)	SB-01-14 06/02/14 19 - 20 SB-01-14 (19-20)	SB-01-14 06/02/14 22 - 23 SB-01-14 (22-23)	SB-01-14 06/02/14 29 - 30 SB-01-14 (29-30)	SB-02-14 06/02/14 3 - 4 SB-02-14 (3-4)	SB-02-14 06/02/14 7.5 - 8 SB-02-14 (7.5-8)	SB-02-14 06/02/14 11 - 12 SB-02-14 (11-12)	SB-02-14 06/02/14 17 - 18 SB-02-14 (17-18)	SB-02-14 06/02/14 20 - 21 SB-02-14 (20-21)	SB-02-14 06/02/14 29 - 30 SB-02-14 (29-30)
Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4 U	0.022 J	19	0.35	5.1 U	0.038 U	0.037 U	0.18 [0.78]	1.8 U	0.74 U	25	0.038 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.2	0.036 U	7.2 U	0.2 U	17	0.038 U	0.037 U	0.038 U [0.2 U]	7.2	3.4	19 U	0.11	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4 U	0.036 U	7.2 U	0.2 U	5.1 U	0.038 U	0.037 U	0.038 U [0.2 U]	1.8 U	0.74 U	19 U	0.038 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.13 J	0.036 U	7.2 U	0.2 U	0.97 J	0.038 U	0.037 U	0.054 [0.08 J]	0.33 J	0.16 J	19 U	0.0091 J	0.037 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2.33 J	0.022 J	19*	0.35	17.97 J*	0.038 U	0.037 U	0.234 [0.86 J]	7.53 J	3.56 J	25*	0.1191 J	0.037 U

See Notes on last page.

Soil SB Analytical PCB Memos
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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-03-14 06/03/14 6 - 7 SB-03-14 (6-7)	SB-03-14 06/03/14 10 - 11 SB-03-14 (10-11)	SB-03-14 06/03/14 16 - 17 SB-03-14 (16-17)	SB-03-14 06/03/14 19 - 20 SB-03-14 (19-20)	SB-03-14 06/03/14 21 - 22 SB-03-14 (21-22)	SB-03-14 06/03/14 26 - 27 SB-03-14 (26-27)	SB-04-14 06/03/14 1 - 2 SB-04-14 (1-2)	SB-04-14 06/03/14 5 - 6 SB-04-14 (5-6)	SB-04-14 06/03/14 12 - 13 SB-04-14 (12-13)	SB-04-14 06/03/14 16 - 17 SB-04-14 (16-17)	SB-04-14 06/03/14 24 - 25 SB-04-14 (24-25)	SB-04-14 06/03/14 29 - 30 SB-04-14 (29-30)	SB-05-14 6/4/2014 5-6 SB-05-14 (5-6)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	1.1	180	3.9 U	0.04 U	0.023 J	0.23	0.035 U	2.4	39 [55]	0.15	0.035 U	0.14
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.3	0.27 U	40 U	18	0.14	0.039 U	0.039 U	0.3	0.53 U	20 U [20 U]	0.04 U	0.035 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.27 U	40 U	3.9 U	0.04 U	0.039 U	0.039 U	0.035 U	0.53 U	20 U [20 U]	0.04 U	0.035 U	0.088
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.16 J	0.059 J	5 J	0.76 Jp	0.0085 J	0.039 U	0.057	0.028 J	0.53 U	20 U [20 U]	0.012 J	0.035 U	0.038 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2.46 J	1.159 J	185 J*	18.76 J*	0.1485 J	0.023 J	0.287	0.328 J	2.4	39 [55]*	0.162 J	0.035 U	0.228

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.180 U	0.190 U	3.8	9.3	0.037 U	0.037 U	0.036 U	0.200 U	4.2	11	2	0.037 U	0.076 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.95	0.93	0.360 U	0.740 U	0.013 J	0.037 U	0.017 J	0.200 U	0.750 U	0.770 U	0.390 U	0.037 U	0.15
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.180 U	0.190 U	0.360 U	0.740 U	0.037 U	0.037 U	0.036 U	0.200 U	0.750 U	0.770 U	0.390 U	0.037 U	0.076 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.180 U	0.190 U	0.084 J	0.200 J	0.037 U	0.037 U	0.036 U	0.200 U	0.170 J	0.260 J	0.390 U	0.037 U	0.076 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.95	0.93	3.8	9.5	0.013	0.037 U	0.017	0.200 U	4.37	11.26	2	0.037 U	0.15

See Notes on last page.

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.820 U	0.040 U	1.900 U	3.600 U	0.190 U	0.042 U	0.076 U	1.900 U	2.000 U	3.600 U	0.074 U	0.039 U	0.042 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.8	0.23	7.4	12	0.062 J	0.020 J	0.11	4.3	5.2	14	0.045 J	0.039 U	0.37
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.820 U	0.040 U	1.900 U	3.600 U	0.190 U	0.042 U	0.076 U	1.900 U	2.000 U	3.600 U	0.074 U	0.039 U	0.042 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.150 J	0.018 J	0.330 J	0.560 J	0.190 U	0.042 U	0.076 U	1.900 U	0.240 J	0.660 J	0.074 U	0.039 U	0.020 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2.95	0.248	7.73	12.56	0.062	0.02	0.11	4.3	5.44	14.66	0.045	0.039 U	0.39

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Location ID: / Date Collected: / Sample Depth(ft): / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-10-14 6/5/2014 8-9 SB-10-14 (8-9)	SB-10-14 6/5/2014 12-13 SB-10-14 (12-13)	SB-10-14 6/5/2014 17-18 SB-10-14 (17-18)	SB-10-14 6/5/2014 21-22 SB-10-14 (21-22)	SB-10-14 6/5/2014 27-28 SB-10-14 (27-28)	SB-11-14 6/6/2014 4-5 SB-11-14 (4-5)	SB-11-14 6/6/2014 8-9 SB-11-14 (8-9)	SB-11-14 6/6/2014 8-9 DUP-04_20140606	SB-11-14 6/6/2014 11-12 SB-11-14 (11-12)	SB-11-14 6/6/2014 17-18 SB-11-14 (17-18)	SB-11-14 6/6/2014 23-24 SB-11-14 (23-24)	SB-11-14 6/6/2014 28-29 SB-11-14 (28-29)	SB-12-14 6/6/2014 4-5 SB-12-14 (4-5)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.040 U	0.041 U	0.380 U	0.039 U	0.040 U	0.039 U	2.2	1.9	0.96	2.4	0.037 U	0.018 J	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.14	0.041 U	1.5	0.039 U	0.040 U	0.039 U	0.370 U	0.360 U	0.190 U	0.360 U	0.037 U	0.038 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.040 U	0.041 U	0.380 U	0.039 U	0.040 U	0.039 U	0.370 U	0.360 U	0.190 U	0.360 U	0.037 U	0.038 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.024 J	0.041 U	0.110 J	0.039 U	0.040 U	0.039 U	0.370 U	0.360 U	0.190 U	0.068 J	0.037 U	0.038 U	0.038 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.164	0.041 U	1.61	0.039 U	0.040 U	0.039 U	2.2	1.9	0.96	2.468	0.037 U	0.018	0.038 U

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.094	1.9	7.4	2.6	0.037 U	0.04 U	0.037 U	37 U	80 U	39 U [20 U]	1.7 U	7 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.041 U	0.380 U	1.800 U	0.400 U	0.037 U	0.052	0.12	130	80 U	39 U [20 U]	9.1	26	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.041 U	0.380 U	1.800 U	0.400 U	0.037 U	0.04 U	0.037 U	37 U	500	190 [140]	1.7 U	7 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.051	0.150 J	1.800 U	0.056 J	0.037 U	0.012 J	0.012 J	37 U	80 U	39 U [20 U]	1.7 U	7 U	0.038 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.145	2.05	7.4	2.656	0.037 U	0.064 J	0.132 J	130*	500*	190 [140]*	9.1	26*	0.038 U

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.038 U	78 U	7.8 U	20 U	20 U	7.2 U	0.039 U	0.33	0.037 U	0.045 U	78 U	200 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.24	0.069	300	47	100	20 U	41	0.039 U	0.034 U	0.64	0.17	390	580
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.038 U	78 U	7.8 U	20 U	150	7.2 U	0.0086 J	0.034 U	0.037 U	0.045 U	78 U	200 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38	0.0093 J	78 U	7.8 U	20 U	20 U	7.2 U	0.039 U	0.019 J	0.13	0.015 J	78 U	200 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.62	0.0783 J	300*	47*	100*	150*	41*	0.0086 J	0.349 J	0.77	0.185 J	390*	580*

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	79 U	0.7 U	0.19 U	0.037 U	0.75 U	0.089	210 U [77 U]	38 U	0.045 U	0.038 U	0.038 U	0.038 U	0.04 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	330	4.1	0.19 U	0.062	2.9	0.038 U	590 [340]	160	0.045 U	0.038 U	0.012 J	0.038 U	0.04 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	79 U	0.7 U	0.19 U	0.037 U	0.75 U	0.0092 J	210 U [77 U]	38 U	0.3	0.2	0.038 U	0.038 U	0.04 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	79 U	0.7 U	0.19 U	0.013 J	0.18 J	0.038 U	210 U [14 J]	7.6 J	0.045 U	0.038 U	0.038 U	0.038 U	0.04 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	330*	4.1	0.19 U	0.075 J	3.08 J	0.0982 J	590 [354 J]*	167.6 J*	0.3	0.2	0.012 J	0.038 U	0.04 U

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.041 U	0.66	0.038 U	0.039 U	0.039 U	0.75 U	0.039 U	0.039 U	0.038 U	0.039 U	0.039 U	0.043 U [0.044 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.0065 J	0.18 U	0.038 U	0.039 U	0.039 U	3.8	0.081	0.15	0.021 J	0.039 U	0.039 U	0.057 [0.091]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.041 U	0.18 U	0.038 U	0.039 U	0.039 U	0.75 U	0.039 U	0.039 U	0.038 U	0.039 U	0.039 U	0.043 U [0.044 U]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.041 U	0.1 J	0.038 U	0.039 U	0.039 U	0.16 J	0.0063 J	0.02 J	0.038 U	0.039 U	0.039 U	0.043 U [0.044 U]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.039 U	0.0065 J	0.76 J	0.038 U	0.039 U	0.039 U	3.96 J	0.0873 J	0.17 J	0.021 J	0.039 U	0.039 U	0.057 [0.091]

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	1	0.49	39	74	0.45 U	2.6 U	0.045 U	0.036 U	0.75 U	0.77 U	0.04 U	0.042 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.25 U	0.23 U	9 U	21 U	2.4	9	0.045 U	0.036 U	1.8	2.3	0.079	0.019 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.25 U	0.23 U	9 U	21 U	0.45 U	2.6 U	0.5	0.11	0.75 U	0.77 U	0.04 U	0.042 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.12 J	0.069 J	1.2 J	21 U	0.4 J	2.6 U	0.045 U	0.036 U	0.75 U	0.77 U	0.04 U	0.042 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.039 U	1.12 J	0.559 J	40.2 J*	74*	2.8 J	9	0.5	0.11	1.8	2.3	0.079	0.019 J

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.21 U	0.04 U	0.21 U [0.081 U]	0.04 U	0.038 U	0.036 U	0.54	2 U	0.04 U	0.04 U	0.038 U	2.2
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.0089 J	1	0.12	1.2 [0.61]	0.04 U	0.038 U	0.036 U	0.08 U	8.7	0.19	0.0055 J	0.038 U	0.78 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.21 U	0.04 U	0.21 U [0.081 U]	0.04 U	0.038 U	0.04	0.08 U	2 U	0.04 U	0.04 U	0.038 U	0.78 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.056 J	0.04 U	0.21 U [0.081 U]	0.04 U	0.038 U	0.036 U	0.033 J	2 U	0.04 U	0.04 U	0.038 U	0.16 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.0089 J	1.056 J	0.12	1.2 [0.61]	0.04 U	0.038 U	0.04	0.573 J	8.7	0.19	0.0055 J	0.038 U	2.36 J

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.35	0.041 U	0.04 U	0.04 U	0.51	1.8 U	19 U	21 U	7.9 U	1.9 U	0.036 U	20 U	1.9 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.08 U	0.23	0.04 U	0.04 U	0.037 U	5.1	64	120	56	10	0.2	140	14
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.08 U	0.041 U	0.04 U	0.04 U	0.18	1.8 U	19 U	21 U	7.9 U	1.9 U	0.036 U	20 U	1.9 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.015 J	0.0094 J	0.04 U	0.04 U	0.037 U	1.8 U	19 U	21 U	7.9 U	1.9 U	0.038	20 U	1.9 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.365 J	0.2394 J	0.04 U	0.04 U	0.69	5.1	64*	120*	56*	10	0.238	140*	14

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-31-14 06/16/14 12 - 14 SB-31-14 (12-14)	SB-31-14 06/16/14 16 - 18 SB-31-14 (16-18)	SB-31-14 06/16/14 22 - 24 SB-31-14 (22-24)	SB-31-14 06/16/14 26 - 28 SB-31-14 (26-28)_20140616	SB-32-14 06/19/14 2 - 4 SB-32-14(2-4)	SB-32-14 06/16/14 6 - 8 SB-32-14 (6-8)	SB-32-14 06/16/14 8 - 10 SB-32-14 (8-10)	SB-32-14 06/16/14 12 - 14 SB-32-14 (12-14)	SB-32-14 06/16/14 16 - 18 SB-32-14 (16-18)	SB-32-14 06/16/14 22 - 24 SB-32-14 (22-24)	SB-33-14 06/19/14 2 - 4 SB-33-14(2-4)	SB-33-14 06/17/14 6 - 8 SB-33-14 (6-8)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	47 U	41 U	22 U	0.04 U	0.037 U	22 U	38 U	7.6 U	0.36 U	0.036 U [3.9 U]	0.19 U	0.39 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	240	41 U	140	0.013 J	0.28	100	110	37	1.7	0.041 [22]	0.32	1.4
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	47 U	450	22 U	0.04 U	0.037 U	22 U	38 U	7.6 U	0.36 U	0.036 U [3.9 U]	0.19 U	0.39 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	47 U	41 U	22 U	0.04 U	0.1	22 U	38 U	7.6 U	0.36 U	0.036 U [3.9 U]	0.077 J	0.39 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	240*	450*	140*	0.013 J	0.38	100*	110*	37*	1.7	0.041 [22]*	0.397 J	1.4

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Location ID: / Date Collected: / Sample Depth(ft): / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-33-14 06/17/14 8 - 10 SB-33-14 (8-10)	SB-33-14 06/17/14 12 - 14 SB-33-14 (12-14)	SB-33-14 06/17/14 16 - 18 SB-33-14 (16-18)	SB-33-14 06/17/14 22 - 24 SB-33-14 (22-24)	SB-38-14 06/23/14 5 - 6 SB-38-14 (5-6)	SB-38-14 06/23/14 12 - 14 SB-38-14 (12-14)	SB-38-14 06/23/14 20 - 22 SB-38-14 (20-22)	SB-38-14 06/23/14 22 - 24 SB-38-14 (22-24)	SB-38-14 06/23/14 24 - 26 SB-38-14 (24-26)	SB-38-14 06/23/14 28 - 30 SB-38-14 (28-30)	SB-39-14 06/23/14 5 - 6 SB-39-14 (5-6)	SB-39-14 06/23/14 18 - 20 SB-39-14 (18-20)	SB-39-14 06/23/14 20 - 22 SB-39-14 (20-22)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 U	18 U	5.8 U	4.1 U	0.2 U	2.5 U	0.041 U	0.039 U	0.038 U	0.046 U	0.54	0.49	0.4 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	200	74	15	13	0.46	18	0.14	0.029 J	0.038 U	0.046 U	0.18 U	0.19 U	0.96
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 U	18 U	5.8 U	4.1 U	0.2 U	2.5 U	0.041 U	0.039 U	0.038 U	0.046 U	0.18 U	0.19 U	0.4 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 U	18 U	5.8 U	4.1 U	0.037 J	0.95 J	0.016 J	0.039 U	0.038 U	0.046 U	0.049 J	0.04 J	0.055 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	200*	74*	15	13	0.497 J	18.95 J*	0.156 J	0.029 J	0.038 U	0.046 U	0.589 J	0.53 J	1.015 J

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U [0.38 U]	0.039 U	0.038 U	0.039 U	0.43 U	0.4 U	0.36 U	0.7 U	3.8 U	0.05 U	0.076	23 [24]	23
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.95 [1.1]	0.074	0.056	0.2	2	0.4 U	1.7	3.5	9.4	0.14	0.037 U	4.3 U [4.5 U]	9.1 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U [0.38 U]	0.039 U	0.038 U	0.039 U	0.43 U	0.57	0.36 U	0.7 U	3.8 U	0.05 U	0.087	55 [71]	52
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.13 J [0.38 U]	0.019 J	0.016 J	0.017 J	0.43 U	0.4 U	0.13 J	0.24 J	0.8 J	0.01 J	0.037 U	4.3 U [4.5 U]	9.1 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.08 J [1.1]	0.093 J	0.072 J	0.217 J	2	0.57	1.83 J	3.74 J	10.2 J	0.15 J	0.163	78 [95]*	75*

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-41-14 06/24/14 24 - 26 SB-41-14 (24-26)	SB-41-14 06/24/14 26 - 28 SB-41-14 (26-28)	SB-41-14 06/24/14 28 - 30 SB-41-14 (28-30)	SB-42-14 06/24/14 5 - 6 SB-42-14 (5-6)	SB-42-14 06/24/14 8 - 10 SB-42-14 (8-10)	SB-42-14 06/24/14 10 - 12 SB-42-14 (10-12)	SB-42-14 06/24/14 30 - 32 SB-42-14 (30-32)	SB-42-14 06/24/14 32 - 34 SB-42-14 (32-34)	SB-42-14 06/24/14 38 - 40 SB-42-14 (38-40)	SB-43-14 06/24/14 3 - 5 SB-43-14 (3-5)	SB-43-14 06/24/14 8 - 10 SB-43-14 (8-10)	SB-43-14 06/24/14 18 - 20 SB-43-14 (18-20)	SB-43-14 06/24/14 24 - 26 SB-43-14 (24-26)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.39 U	0.038 U	0.036 U	2 U	0.81 U	3.8 U	0.19 U	0.038 U	0.21 U	0.38 U	1	0.04 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.29	4.3	0.042	0.31	23	2.5	18	1.4	0.0054 J	0.59	2.7	0.2 U	0.022 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.39 U	0.038 U	0.036 U	2 U	0.81 U	3.8 U	0.19 U	0.038 U	0.21 U	0.38 U	0.48	0.04 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.023 J	0.32 J	0.038 U	0.067	2.1	0.12 J	1.5 J	0.11 J	0.038 U	0.053 J	0.21 J	0.2 U	0.04 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.313 J	4.62 J	0.042	0.377	25.1*	2.62 J	19.5 J*	1.51 J	0.0054 J	0.643 J	2.91 J	1.48	0.022 J

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-43-14 06/24/14 26 - 28 SB-43-14 (26-28)	SB-43-14 06/24/14 28 - 30 SB-43-14 (28-30)	SB-43-14 06/24/14 30 - 32 SB-43-14 (30-32)	SB-44-14 06/25/14 6 - 8 SB-44-14 (6-8)	SB-44-14 06/25/14 14 - 16 SB-44-14 (14-16)	SB-44-14 06/25/14 16 - 18 SB-44-14 (16-18)	SB-44-14 06/25/14 18 - 20 SB-44-14 (18-20)	SB-44-14 06/25/14 20 - 22 SB-44-14 (20-22)	SB-44-14 06/25/14 28 - 30 SB-44-14 (28-30)	SB-45-14 06/25/14 3 - 5 SB-45-14 (3-5)	SB-45-14 06/25/14 5 - 6 SB-45-14 (5-6)	SB-45-14 06/25/14 6 - 8 SB-45-14 (6-8)	SB-45-14 06/25/14 8 - 10 SB-45-14 (8-10)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.2 U	2.1 U	0.037 U	20 U	0.49 U	0.043 U	0.035 U	0.77 U	0.04 U [0.039 U]	0.29	4.3	340	260
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.1	28	0.037 U	43	0.49 U	0.043 U	0.035 U	2.1	0.04 U [0.039 U]	0.043 U	0.94 U	81 U	20 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.2 U	2.1 U	0.037 U	20 U	0.49 U	0.043 U	0.019 J	0.77 U	0.04 U [0.039 U]	0.043 U	0.94 U	81 U	20 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.077 J	1.4 J	0.037 U	20 U	0.49 U	0.043 U	0.035 U	0.77 U	0.04 U [0.039 U]	0.025 J	0.21 J	81 U	20 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.177 J	29.4 J*	0.037 U	43*	0.49 U	0.043 U	0.019 J	2.1	0.04 U [0.039 U]	0.315 J	4.51 J	340*	260*

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	43	20 U	2.1 U	2.2 U	7.8 U	0.23 U	0.04 U	0.2 U	0.2 U	0.14	0.038 U	0.04 U	0.048 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	65	7.4	10	17	0.81	0.04 U	0.44	0.97	0.038 U	0.038 U	0.032 J	0.018 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	20 U	2.1 U	2.2 U	7.8 U	0.23 U	0.04 U	0.2 U	0.2 U	0.14	0.3	0.04 U	0.048 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	20 U	2.1 U	2.2 U	7.8 U	0.03 J	0.04 U	0.046 J	0.089 J	0.038 U	0.038 U	0.023 J	0.048 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	43*	65*	7.4	10	17*	0.84 J	0.04 U	0.486 J	1.059 J	0.28	0.3	0.055 J	0.018 J

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.045 U	0.8 U	20 U	0.04 U	0.041 U	0.035 U	1.1	0.19 U	0.039 U	0.037 U	0.042 U	3.5 U	0.38 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2	4	43	0.15	0.079	0.012 J	0.38 U	0.56	0.26	0.037 U	0.22	23	0.63
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.045 U	0.8 U	20 U	0.04 U	0.041 U	0.035 U	0.16 J	0.19 U	0.039 U	0.037 U	0.042 U	3.5 U	0.38 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.045 U	0.8 U	20 U	0.028 J	0.013 J	0.035 U	0.38 U	0.19 U	0.039 U	0.037 U	0.042 U	3.5 U	0.1 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.2	4	43*	0.178 J	0.092 J	0.012 J	1.26 J	0.56	0.26	0.037 U	0.22	23*	0.73 J

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-48-14 07/25/14 8 - 10 SB-48-14 (8-10)	SB-48-14 07/25/14 12 - 14 SB-48-14 (12-14)	SB-48-14 07/25/14 18 - 20 SB-48-14 (18-20)	SB-48-14 07/25/14 24 - 26 SB-48-14 (24-26)	SB-48-14 07/25/14 28 - 30 SB-48-14 (28-30)	SB-48-14 07/25/14 32 - 34 SB-48-14 (32-34)	SB-48-14 07/25/14 34 - 36 SB-48-14 (34-36)	SB-49-14 07/21/14 2 - 3 SB-49-14 (2-3)	SB-49-14 07/29/14 6 - 8 SB-49-14(6-8)	SB-49-14 07/29/14 12 - 14 SB-49-14(12-14)	SB-49-14 07/29/14 18 - 20 SB-49-14(18-20)	SB-49-14 07/29/14 22 - 24 SB-49-14(22-24)	SB-49-14 07/29/14 24 - 26 SB-49-14(24-26)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.9 U [3.7 U]	7.6 U	2 U	0.43 U	2.1 U	0.2 U	0.04 U	0.042 U	0.35 U	2.2 U	9.5 U	0.039 U	0.039 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	21 [28]	34	13	2	12	1.3	0.27	0.12	2.2	15	47	0.064	0.066
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.9 U [3.7 U]	7.6 U	2 U	0.43 U	2.1 U	0.2 U	0.04 U	0.042 U	0.35 U	2.2 U	9.5 U	0.093	0.053
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.9 U [3.7 U]	7.6 U	2 U	0.43 U	2.1 U	0.2 U	0.04 U	0.018 J	0.35 U	2.2 U	9.5 U	0.039 U	0.039 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	21 [28]*	34*	13	2	12	1.3	0.27	0.138 J	2.2	15	47*	0.157	0.119

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-50-14 07/22/14 2 - 4 SB-50-14 (2-4)	SB-50-14 07/28/14 8 - 10 SB-50-14(8-10)	SB-50-14 07/28/14 12 - 14 SB-50-14(12-14)	SB-50-14 07/28/14 18 - 20 SB-50-14(18-20)	SB-50-14 07/28/14 22 - 24 SB-50-14(22-24)	SB-50-14 07/28/14 28 - 30 SB-50-14(28-30)	SB-51-14 07/22/14 2 - 4 SB-51-14 (2-4)	SB-51-14 07/29/14 6 - 8 SB-51-14(6-8)_20140729	SB-51-14 07/29/14 8 - 10 SB-51-14(8-10)	SB-51-14 07/29/14 10 - 12 SB-51-14(10-12)_20140729	SB-51-14 07/29/14 12 - 14 SB-51-14(12-14)	SB-51-14 07/29/14 16 - 18 SB-51-14(16-18)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.084 U	2.1 U	0.038 U	0.041 U	1.9 U	0.039 U	0.88	0.24 UH	20 U	0.23 UH	0.26 U	0.034 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.41	6.3	0.038 U	0.041 U	4.5	0.039 U	0.18 U	1.3 H	120	0.23 UH	0.31	0.034 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.084 U	6.8	0.038 U	0.12	1.9 U	0.039 U	0.18 U	0.24 UH	20 U	1.1 H	1.1	0.21
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 J	2.1 U	0.097	0.041 U	1.9 U	0.039 U	0.095 J	0.24 UH	20 U	0.23 UH	0.26 U	0.12
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.88 H	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.449 J	13.1	0.097	0.12	4.5	0.039 U	0.975 J	1.3	120*	1.98	1.41	0.33

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-51-14 07/29/14 24 - 26 SB-51-14(24-26)	SB-51-14 07/29/14 28 - 30 SB-51-14(28-30)	SB-52-14 07/22/14 0 - 2 SB-52-14 (0-2)	SB-52-14 07/29/14 4 - 6 SB-52-14(4-6)	SB-52-14 07/29/14 6 - 8 SB-52-14(6-8)_20140729	SB-52-14 07/29/14 8 - 10 SB-52-14(8-10)	SB-52-14 07/29/14 10 - 12 SB-52-14(10-12)	SB-52-14 07/29/14 16 - 18 SB-52-14(16-18)	SB-52-14 07/29/14 22 - 24 SB-52-14(22-24)	SB-52-14 07/29/14 24 - 26 SB-52-14(24-26)	SB-52-14 07/29/14 30 - 32 SB-52-14(30-32)	SB-53-14 07/28/14 2 - 3.5 SB-53-14(2-3.5)	SB-53-14 07/30/14 8 - 10 SB-53-14(8-10)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.69 U	0.07 U	0.37 U	0.19 U	0.79 UH	19 U	10 U	0.36 U	0.35 U	0.37 U [0.35 U]	0.038 U	0.036 U	0.35 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	3.9	0.046 J	1.4	0.69	5.7 H	110	10 U	2.1	2.1	3.1 [2.2]	0.011 J	0.16	1.5
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	3	0.048 J	0.37 U	0.19 U	0.79 UH	19 U	29	0.36 U	0.35 U	0.37 U [0.35 U]	0.006 J	0.036 U	0.35 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.69 U	0.07 U	0.11 J	0.19 U	0.79 UH	19 U	10 U	0.36 U	0.35 U	0.37 U [0.35 U]	0.038 U	0.038	0.35 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	6.9	0.094 J	1.51 J	0.69	5.7	110*	29*	2.1	2.1	3.1 [2.2]	0.017 J	0.198	1.5

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.18 U	1.9 U	19 U	3.7 U	0.18 U	0.38 U	4.2 U	19 U [21 U]	0.045 U	1.8 U	0.072 U	0.037 U	1.7 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.45	5.4	53	12	0.27	0.38 U	27	140 [110]	0.21	12	0.33	0.075	4
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.18 U	1.9 U	19 U	3.7 U	0.18 U	0.97	4.2 U	19 U [21 U]	0.045 U	1.8 U	0.072 U	0.037 U	1.7 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.18 U	1.9 U	19 U	3.7 U	0.049 J	0.38 U	4.2 U	19 U [21 U]	0.045 U	1.8 U	0.082	0.037 U	1.7 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.45	5.4	53*	12	0.319 J	0.97	27*	140 [110]*	0.21	12	0.412	0.075	4

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.8 U	0.043 U	0.041 U	0.37 U	0.039 U	4.4 U	4.1 U	0.04 U	0.039 U	0.18 U	0.043 U	21 U	8.4 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	15	0.042 J	0.022 J	1.8	0.11	13	18	0.072	0.12	0.18 U	0.043 U	91	34
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.8 U	0.039 J	0.041 U	0.37 U	0.19	4.4 U	4.1 U	0.036 J	0.039 U	0.58	0.099	21 U	8.4 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.8 U	0.043 U	0.041 U	0.37 U	0.039 U	4.4 U	4.1 U	0.04 U	0.039 U	0.18 U	0.043 U	21 U	8.4 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	15	0.081 J	0.022 J	1.8	0.3	13	18*	0.108 J	0.12	0.58	0.099	91*	34*

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2 U [2.2 U]	0.038 U	2.2 U	8.9 U	8.5 U	1.8 U	2.2 U	0.04 U	0.38 U	0.037 U	0.037 U	0.043 U	2.1 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	7.1 [6.7]	0.21	16	35	26	13	18	0.023 J	1.8	0.16	0.017 J	0.029 J	7.8
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2 U [2.2 U]	0.038 U	2.2 U	8.9 U	8.5 U	1.8 U	2.2 U	0.04 U	0.38 U	0.037 U	0.037 U	0.043 U	2.1 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2 U [2.2 U]	0.038 U	2.2 U	8.9 U	8.5 U	1.8 U	2.2 U	0.04 U	0.38 U	0.018 J	0.0043 J	0.014 J	0.37 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	7.1 [6.7]	0.21	16*	35*	26*	13	18*	0.023 J	1.8	0.178 J	0.0213 J	0.043 J	8.17 J

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Detected PCBs																			
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.7	7.8 U	7.5 U	3.8 U	4.1 U	3.8 U	3.5 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 J	0.36 U	64	43	31	13	25	24	0.23
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.36 U	7.8 U	7.5 U	3.8 U	4.1 U	3.8 U	3.5 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.095 J	3.1 J	3.2 J	1.8 J	1.4 J	1.1 J	1.2 J	0.025 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.01 J	0.795 J	67.1 J*	46.2 J*	32.8 J*	14.4 J	26.1 J*	25.2 J*	0.255 J

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Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.19 U	0.038 U	0.038 U	0.76 U	0.04 U [0.039 U]	0.038 U	0.035 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.084	0.22	0.62	0.038 U	4.1	0.21 [0.25]	0.038 U	0.06
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.19 U	0.038 U	0.038 U	0.76 U	0.04 U [0.039 U]	0.038 U	0.035 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.015 J	0.18 J	0.085	0.038 U	0.24 J	0.15 [0.083]	0.038 U	0.041
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.099 J	0.4 J	0.705	0.038 U	4.34 J	0.36 [0.333]	0.038 U	0.101

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-62-14 08/18/14 9 - 10 SB-62-14_(9-10) 081814	SB-62-14 08/18/14 13 - 14 SB-62-14_(13-14) 081814	SB-62-14 08/18/14 19 - 20 SB-62-14_(19-20) 081814	SB-62-14 08/18/14 21 - 22 SB-62-14_(21-22) 081814	SB-62-14 08/18/14 27 - 28 SB-62-14_(27-28) 081814	SB-63-14 08/19/14 3 - 4 SB-63-14_(3-4) 081914	SB-63-14 08/19/14 9 - 10 SB-63-14_(9-10) 081914	SB-63-14 08/19/14 11 - 12 SB-63-14_(11-12) 081914
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.72 U	0.036 U	0.035 U	0.034 U	0.038 U	0.19 U	0.22 U	0.042 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.72 U	0.036 U	0.035 U	0.034 U	0.038 U	0.66	1.3	0.19
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	8	0.036 U	0.035 U	0.034 U	0.038 U	0.19 U	0.22 U	0.042 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.72 U	0.036 U	0.035 U	0.034 U	0.038 U	0.11 J	0.86	0.026 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	8	0.036 U	0.035 U	0.034 U	0.038 U	0.77 J	2.16	0.216 J

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-63-14 08/19/14 19 - 20 SB-63-14_(19-20) 081914	SB-63-14 08/19/14 23 - 24 SB-63-14_(23-24) 081914	SB-63-14 08/19/14 29 - 30 SB-63-14_(29-30) 081914	SB-64-14 08/19/14 3 - 4 SB-64-14_(3-4) 081914	SB-64-14 08/19/14 7 - 8 SB-64-14_(7-8) 081914	SB-64-14 08/19/14 13 - 14 SB-64-14_(13-14) 081914	SB-64-14 08/19/14 17 - 18 SB-64-14_(17-18) 081914	SB-65-14 08/19/14 3 - 4 SB-65-14_(3-4) 081914	SB-65-14 08/19/14 9 - 10 SB-65-14_(9-10) 081914
Detected PCBs																			
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.034 U	0.034 U	0.038 U	0.038 U	0.04 U	0.037 U	0.72	0.044 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.034 U	0.034 U	0.19	0.038 U	0.068	0.39	0.18 U	0.044 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.034 U	0.034 U	0.038 U	0.038 U	0.04 U	0.037 U	0.18 U	0.044 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.034 U	0.034 U	0.33	0.0097 J	0.012 J	0.018 J	0.088 J	0.044 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.034 U	0.034 U	0.52	0.0097 J	0.08 J	0.408 J	0.808 J	0.044 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-65-14 08/19/14 13 - 14 SB-65-14_(13-14) 081914	SB-65-14 08/19/14 19 - 20 SB-65-14_(19-20) 081914	SB-65-14 08/19/14 21 - 22 SB-65-14_(21-22) 081914	SB-65-14 08/19/14 27 - 28 SB-65-14_(27-28) 081914	SB-66-14 08/19/14 1 - 2 SB-66-14_(1-2) 081914	SB-66-14 08/19/14 9 - 10 SB-66-14_(9-10) 081914	SB-66-14 08/19/14 13 - 14 SB-66-14_(13-14) 081914	SB-66-14 08/19/14 19 - 20 SB-66-14_(19-20) 081914
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.04 U	0.04 U	0.041 U	0.076 U	0.035 U	0.046 U	0.043 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.014 J	0.028 J	0.041 U	0.33	0.035 U	0.046 U	0.013 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.04 U	0.04 U	0.041 U	0.076 U	0.035 U	0.046 U	0.043 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.04 U	0.04 U	0.041 U	0.05 J	0.035 U	0.013 J	0.01 J
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.014 J	0.028 J	0.041 U	0.38 J	0.035 U	0.013 J	0.023 J

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-66-14 08/19/14 21 - 22 SB-66-14_(21-22) 081914	SB-66-14 08/19/14 29 - 30 SB-66-14_(29-30) 081914	SB-74-15 04/28/15 2 - 4 SB-74-15_(2-4)	SB-74-15 04/28/15 8 - 9 SB-74-15_(8-9)	SB-74-15 04/28/15 10.5 - 11.5 SB-74-15_(10.5-11.5)	SB-74-15 04/28/15 19 - 20 SB-74-15_(19-20)	SB-74-15 04/28/15 24 - 25 SB-74-15_(24-25)	SB-74-15 04/28/15 29 - 30 SB-74-15_(29-30)	SB-75-15 04/28/15 4 - 5 SB-75-15_(4-5)	SB-75-15 04/28/15 9 - 10 SB-75-15_(9-10)	SB-75-15 04/28/15 11 - 12 SB-75-15_(11-12)
Detected PCBs																					
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.042 U	0.17 U	0.17 U	0.07 U	0.038 U	0.042 U	0.043 U	3.6 U	0.19 U [0.2 U]	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.033 J	0.042 U	0.17 U	0.17 U	0.07 U	0.038 U	0.042 U	0.043 U	24	1.2 [0.95]	0.19
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.042 U	0.17 U	0.17 U	0.07 U	0.038 U	0.042 U	0.043 U	3.6 U	0.19 U [0.2 U]	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.015 J	0.042 U	0.17 U	0.17 U	0.07 U	0.038 U	0.042 U	0.043 U	3.6 U	0.19 U [0.2 U]	0.038 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.048 J	0.042 U	0.17 U	0.17 U	0.07 U	0.038 U	0.042 U	0.043 U	24*	1.2 [0.95]	0.19

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-76-15 04/29/15 2 - 4 SB-76-15_(2-4)	SB-76-15 04/29/15 7 - 8 SB-76-15_(7-8)	SB-76-15 04/29/15 12 - 13 SB-76-15_(12-13)	SB-76-15 04/29/15 17 - 18 SB-76-15_(17-18)	SB-76-15 04/29/15 21 - 22 SB-76-15_(21-22)	SB-76-15 04/29/15 25 - 26 SB-76-15_(25-26)	SB-77-15 04/29/15 9 - 10 SB-77-15_(9-10)	SB-77-15 04/29/15 20 - 21 SB-77-15_(20-21)	SB-77-15 04/29/15 29 - 30 SB-77-15_(29-30)	SB-78-15 04/30/15 8 - 9 SB-78-15_(8-9)	SB-78-15 04/30/15 10 - 11 SB-78-15_(10-11)	SB-78-15 04/30/15 26 - 27 SB-78-15_(26-27)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	0.039 U	0.039 U	0.039 U	0.041 U	0.037 U	0.04 U	0.042 U	0.19 U	0.075 U	0.041 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.83	0.2	0.039 U	0.039 U	0.039 U	0.041 U	0.35	0.04 U	0.042 U	0.19 U	0.042 J	0.041 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	0.039 U	0.039 U	0.039 U	0.041 U	0.037 U	0.04 U	0.042 U	0.19 U	0.075 U	0.041 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	0.039 U	0.039 U	0.039 U	0.041 U	0.037 U	0.04 U	0.042 U	0.19 U	0.075 U	0.041 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.83	0.2	0.039 U	0.039 U	0.039 U	0.041 U	0.35	0.04 U	0.042 U	0.19 U	0.042 J	0.041 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-79-15 04/30/15 13 - 14 SB-79-15_(13-14)	SB-79-15 04/30/15 20.5 - 21.5 SB-79-15_(20.5-21.5)	SB-79-15 04/30/15 26 - 27 SB-79-15_(26-27)	SB-80-15 04/30/15 8 - 9 SB-80-15_(8-9)	SB-80-15 04/30/15 24 - 25 SB-80-15_(24-25)	SB-80-15 04/30/15 36.5 - 37.5 SB-80-15_(36.5-37.5)	SB-81-15 05/01/15 12 - 13 SB-81-15_(12-13)	SB-81-15 05/01/15 18 - 19 SB-81-15_(18-19)	SB-81-15 05/01/15 38 - 40 SB-81-15_(38-40)	SB-84-17 10/30/17 0 - 2 SB-84-17_(0-2)	SB-84-17 10/30/17 2 - 4 SB-84-17_(2-4)	SB-84-17 10/30/17 4 - 6 SB-84-17_(4-6)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.088	0.041 U	0.19 U	0.034 U	0.37 U	0.036 U	0.034 U [0.035 U]	0.17 U	0.33 U	3.3 Y	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.041 U	1.6	0.094	0.37 U	0.036 U	0.034 U [0.035 U]	1.6	0.33 U	0.6 UY	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.02 J	0.093	0.041 U	0.19 U	0.034 U	0.37 U	0.036 U	0.034 U [0.035 U]	0.17 U	0.33 U	0.6 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.041 U	0.12 J	0.034 U	0.37 U	0.043 p	0.034 U [0.035 U]	0.057 J	0.33 U	0.6 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.02 J	0.181	0.041 U	1.72 J	0.094	0.37 U	0.043	0.034 U [0.035 U]	1.657 J	0.33 U	3.3	0.33 U

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	5 Y	143 Y	227 Y	20 Y	0.33 U	61 Y	0.5 UY [115 Y]	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	30 UY	30 UY	5 UY	0.33 U	6 UY	3.4 Y [12 UY]	3.4 Y	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	30 UY	30 UY	5 UY	0.33 U	6 UY	0.5 UY [12 UY]	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	30 UY	30 UY	5 UY	0.33 U	6 UY	0.5 UY [12 UY]	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	5	143*	227*	20*	0.33 U	61*	3.4 [115]*	3.4	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	57 Y	79 Y	27 Y	0.33 U	21 UY	0.33 U	7 UY	0.33 U	0.33 U	0.33 U	0.33 U	38 Y	183 Y
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	12 UY	6 UY	1	143 Y	0.5	27 Y	0.33 U	0.33 U	0.33 U	0.33 U	5 UY	29 UY
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	12 UY	6 UY	0.33 U	21 UY	0.33 U	7 UY	0.33 U	0.33 U	0.33 U	0.33 U	5 UY	29 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	12 UY	6 UY	0.33 U	21 UY	0.33 U	7 UY	0.33 U	0.33 U	0.33 U	0.33 U	5 UY	29 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	57*	79*	27*	1	143*	0.5	27*	0.33 U	0.33 U	0.33 U	0.33 U	38*	183*

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-86-17 10/30/17 8 - 10 SB-86-17_(8-10)	SB-86-17 10/30/17 10 - 12 SB-86-17_(10-12)	SB-86-17 10/30/17 12 - 14 SB-86-17_(12-14)	SB-86-17 10/30/17 14 - 16 SB-86-17_(14-16)	SB-86-17 10/30/17 16 - 18 SB-86-17_(16-18)	SB-86-17 10/30/17 18 - 20 SB-86-17_(18-20)	SB-86-17 10/30/17 20 - 22 SB-86-17_(20-22)	SB-86-17 10/30/17 22 - 24 SB-86-17_(22-24)	SB-87-17 10/31/17 0 - 2 SB-87-17_(0-2)	SB-87-17 10/31/17 2 - 4 SB-87-17_(2-4)	SB-87-17 10/31/17 4 - 6 SB-87-17_(4-6)	SB-87-17 10/31/17 6 - 8 SB-87-17_(6-8)	SB-87-17 10/31/17 8 - 10 SB-87-17_(8-10)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	271 Y [217 Y]	27 UY [44 Y]	120 Y	35 Y	196 Y	5 Y	7 Y	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	57 UY [45 UY]	114 Y [5 UY]	12 UY	5 UY	29 UY	1 UY	1 UY	0.33 U	0.33 U	0.33 U	1.2	1	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	57 UY [45 UY]	27 UY [5 UY]	12 UY	5 UY	29 UY	1 UY	1 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	57 UY [45 UY]	27 UY [5 UY]	12 UY	5 UY	29 UY	1 UY	1 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	271 [217]*	114 [44]*	120*	35*	196*	5	7	0.33 U	0.33 U	0.33 U	1.2	1	0.33 U

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Location ID: / Date Collected: / Sample Depth(ft): / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-87-17 10/31/17 10 - 12 SB-87-17_(10-12)	SB-87-17 10/31/17 12 - 14 SB-87-17_(12-14)	SB-87-17 10/31/17 14 - 16 SB-87-17_(14-16)	SB-87-17 10/31/17 16 - 18 SB-87-17_(16-18)	SB-87-17 10/31/17 18 - 20 SB-87-17_(18-20)	SB-87-17 10/31/17 20 - 22 SB-87-17_(20-22)	SB-88-17 10/31/17 0 - 2 SB-88-17_(0-2)	SB-88-17 10/31/17 2 - 4 SB-88-17_(2-4)	SB-88-17 10/31/17 4 - 6 SB-88-17_(4-6)	SB-88-17 10/31/17 6 - 8 SB-88-17_(6-8)	SB-88-17 10/31/17 8 - 10 SB-88-17_(8-10)	SB-88-17 10/31/17 10 - 12 SB-88-17_(10-12)	SB-88-17 10/31/17 12 - 14 SB-88-17_(12-14)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.7]	0.33 U	13 Y	3.6	51 Y	0.33 U	0.33 U	0.5	0.33 U	0.33 U	0.33 U	2.4
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4	1.3 [0.33 U]	0.6	1 UY	0.33 U	6 UY	0.4	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	1 UY	0.33 U	6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	1 UY	0.33 U	6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.4	1.3 [0.7]	0.6	13	3.6	51*	0.4	0.33 U	0.5	0.33 U	0.33 U	0.33 U	2.4

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	167 Y [136 Y]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	2.2	0.7	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 UY [32 UY]	0.33 U	0.33 U	0.33 U	0.6	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 UY [32 UY]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 UY [32 UY]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	167 [136]*	0.33 U	0.33 U	0.33 U	0.6	0.33 U	0.33 U [0.33 U]	2.2	0.7	0.33 U	0.33 U	0.33 U	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-90-17 10/31/17 8 - 10 SB-90-17_(8-10)	SB-90-17 10/31/17 10 - 12 SB-90-17_(10-12)	SB-90-17 10/31/17 12 - 14 SB-90-17_(12-14)	SB-90-17 10/31/17 14 - 16 SB-90-17_(14-16)	SB-90-17 10/31/17 16 - 18 SB-90-17_(16-18)	SB-90-17 10/31/17 18 - 20 SB-90-17_(18-20)	SB-90-17 10/31/17 20 - 22 SB-90-17_(20-22)	SB-90-17 10/31/17 22 - 24 SB-90-17_(22-24)	SB-90-17 10/31/17 24 - 26 SB-90-17_(24-26)	SB-91-17 10/31/17 0 - 2 SB-91-17_(0-2)	SB-91-17 10/31/17 2 - 4 SB-91-17_(2-4)	SB-91-17 10/31/17 4 - 6 SB-91-17_(4-6)	SB-91-17 10/31/17 6 - 8 SB-91-17_(6-8)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	57 UY	36 UY	6 UY	0.6 UY	17 UY [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	106 Y	196 Y	27 Y	4 Y	34 Y [4]	0.33 U	0.33 U	0.33 U	3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	57 UY	36 UY	6 UY	0.6 UY	17 UY [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	57 UY	36 UY	6 UY	0.6 UY	17 UY [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	106*	196*	27*	4	34 [4]*	0.33 U	0.33 U	0.33 U	3

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	23 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.6	0.33 U [0.33 U]	0.33 U	0.33 U	0.8	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.4	140 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	23 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	23 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.6	0.33 U [0.33 U]	0.33 U	0.33 U	0.8	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.4	140*

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.6 UY	6 UY	2 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	5 Y	3 Y	20 Y	10 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.6 UY	6 UY	2 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.6 UY	6 UY	2 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	5	3	20*	10

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Detected PCBs																								
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	1 UY	0.33 U	11 UY [6 UY]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	2 Y	13 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	16 Y	6 Y	3	40 Y [21 Y]	0.6	0.6	0.33 U	0.33 U	0.33 U	0.33 U	0.5 UY	56 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	1 UY	0.33 U	11 UY [6 UY]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.5 UY	13 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	1 UY	0.33 U	11 UY [6 UY]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.5 UY	13 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	16*	6	3	40 [21]*	0.6	0.6	0.33 U	0.33 U	0.33 U	0.33 U	2	56*

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-95-17 11/01/17 10 - 12 SB-95-17_(10-12)	SB-95-17 11/01/17 12 - 14 SB-95-17_(12-14)	SB-95-17 11/01/17 14 - 16 SB-95-17_(14-16)	SB-96-17 11/01/17 0 - 2 SB-96-17_(0-2)	SB-96-17 11/01/17 2 - 4 SB-96-17_(2-4)	SB-96-17 11/01/17 4 - 6 SB-96-17_(4-6)	SB-96-17 11/01/17 6 - 8 SB-96-17_(6-8)	SB-96-17 11/01/17 8 - 10 SB-96-17_(8-10)	SB-96-17 11/01/17 10 - 12 SB-96-17_(10-12)	SB-96-17 11/01/17 12 - 14 SB-96-17_(12-14)	SB-96-17 11/01/17 14 - 16 SB-96-17_(14-16)	SB-96-17 11/01/17 16 - 18 SB-96-17_(16-18)	SB-96-17 11/01/17 18 - 20 SB-96-17_(18-20)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 UY	13 UY	7 UY [1 U]	0.33 U	0.33 U	0.33 U	0.33 U	12 UY	13 UY	12 UY [13 UY]	1 UY	1 UY	6 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	137 Y	27 Y	67 Y [9]	0.33 U	0.33 U	0.33 U	0.33 U	24 Y	38 Y	61 Y [39 Y]	4 Y	4 Y	12 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 UY	13 UY	7 UY [1 U]	0.33 U	0.33 U	0.33 U	0.33 U	12 UY	13 UY	12 UY [13 UY]	1 UY	1 UY	6 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	38 UY	13 UY	7 UY [1 U]	0.33 U	0.33 U	0.33 U	0.33 U	12 UY	13 UY	12 UY [13 UY]	1 UY	1 UY	6 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	137*	27*	67 [9]*	0.33 U	0.33 U	0.33 U	0.33 U	24*	38*	61 [39]*	4	4	12

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1 UY	0.6 UY	3 UY	0.33 U	0.33 U	0.33 U	0.33 U	1 UY	0.6 UY	0.6 UY [0.33 U]	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	7 Y	3 Y	8 Y	0.33 U	0.33 U	0.33 U	0.33 U	10 Y	4 Y	0.6 UY [0.33 U]	0.33 U	1.3	2
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1 UY	0.6 UY	3 UY	0.33 U	0.33 U	0.33 U	0.33 U	1 UY	0.6 UY	2.5 Y [3]	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1 UY	0.6 UY	3 UY	0.33 U	0.33 U	0.33 U	0.33 U	1 UY	0.6 UY	0.6 UY [0.33 U]	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	7	3	8	0.33 U	0.33 U	0.33 U	0.33 U	10	4	2.5 [3]	0.33 U	1.3	2

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Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6 UY	0.6 UY	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4	0.5	1.2	0.33 U	0.33 U	0.33 U	0.33 U	6 UY	3 Y	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	12 Y	0.6 UY	0.33 U [3]	1	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6 UY	0.6 UY	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.4	0.5	1.2	0.33 U	0.33 U	0.33 U	0.33 U	12	3	0.33 U [3]	1	0.33 U	0.33 U

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Location ID: / Date Collected: / Sample Depth(ft): / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-98-17 11/01/17 20 - 22 SB-98-17_(20-22)	SB-98-17 11/01/17 22 - 24 SB-98-17_(22-24)	SB-98-17 11/01/17 24 - 26 SB-98-17_(24-26)	SB-99-17 11/01/17 0 - 2 SB-99-17_(0-2)	SB-99-17 11/01/17 2 - 4 SB-99-17_(2-4)	SB-99-17 11/01/17 4 - 6 SB-99-17_(4-6)	SB-99-17 11/01/17 6 - 8 SB-99-17_(6-8)	SB-99-17 11/01/17 8 - 10 SB-99-17_(8-10)	SB-99-17 11/01/17 10 - 12 SB-99-17_(10-12)	SB-99-17 11/01/17 12 - 14 SB-99-17_(12-14)	SB-99-17 11/01/17 14 - 16 SB-99-17_(14-16)	SB-100-17 11/01/17 0 - 2 SB-100-17_(0-2)	SB-100-17 11/01/17 2 - 4 SB-100-17_(2-4)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	1.2	0.33 U	0.33 U	12 UY	1 UY [1 UY]	1 UY	7 UY	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	36 Y	7 Y [6 Y]	12 Y	30 Y	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	12 UY	1 UY [1 UY]	1 UY	7 UY	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	12 UY	1 UY [1 UY]	1 UY	7 UY	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	1.2	0.33 U	0.33 U	36*	7 [6]	12	30*	0.33 U	0.33 U

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Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	2 UY	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.1	1.1	10 Y	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	5 Y	0.33 U [0.33 U]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	2 UY	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	2 UY	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.1	1.1	10	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	5	0.33 U [0.33 U]

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Detected PCBs																				
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	3.3 Y	1.1
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	3.3	1.1

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Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	20 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	20*

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Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	8.4 Y
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	3.6 Y	2.9	1 UY
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	1 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	1 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	3.6	2.9	8.4

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-103-18 03/20/18 10 - 12 SB-103-18_(10-12) (03-20-2018)	SB-103-18 03/20/18 12 - 14 SB-103-18_(12-14) (03-20-2018)	SB-103-18 03/20/18 14 - 16 SB-103-18_(14-16) (03-20-2018)	SB-103-18 03/20/18 16 - 18 SB-103-18_(16-18) (03-20-2018)	SB-103-18 03/20/18 18 - 20 SB-103-18_(18-20) (03-20-2018)	SB-104-18 03/20/18 0 - 2 SB-104-18_(0-2) (03-20-2018)	SB-104-18 03/20/18 2 - 4 SB-104-18_(2-4) (03-20-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.6 UY	0.5 UY	0.33 U	0.33 U	0.33 U	0.33 U	5.3 Y
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2.5 Y	2.4 Y	0.33 U	0.33 U	0.33 U	0.4	1 UY
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.6 UY	0.5 UY	0.33 U	0.33 U	0.33 U	0.33 U	1 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.6 UY	0.5 UY	0.33 U	0.33 U	0.33 U	0.33 U	1 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2.5	2.4	0.33 U	0.33 U	0.33 U	0.4	5.3

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-104-18 03/20/18 4 - 6 SB-104-18_(4-6) (03-20-2018)	SB-104-18 03/20/18 6 - 8 SB-104-18_(6-8) (03-20-2018)	SB-104-18 03/20/18 8 - 10 SB-104-18_(8-10) (03-20-2018)	SB-104-18 03/20/18 10 - 12 SB-104-18_(10-12) (03-20-2018)	SB-104-18 03/20/18 12 - 14 SB-104-18_(12-14) (03-20-2018)	SB-104-18 03/20/18 14 - 16 SB-104-18_(14-16) (03-20-2018)	SB-104-18 03/20/18 16 - 18 SB-104-18_(16-18) (03-20-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.2 Y	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	3.2	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-104-18 03/20/18 18 - 20 SB-104-18_(18-20) (03-20-2018)	SB-105-18 03/20/18 0 - 2 SB-105-18_(0-2) (03-20-2018)	SB-105-18 03/20/18 2 - 4 SB-105-18_(2-4) (03-20-2018)	SB-105-18 03/20/18 4 - 6 SB-105-18_(4-6) (03-20-2018)	SB-105-18 03/20/18 6 - 8 SB-105-18_(6-8) (03-20-2018)	SB-105-18 03/20/18 8 - 10 SB-105-18_(8-10) (03-20-2018)	SB-105-18 03/20/18 10 - 12 SB-105-18_(10-12) (03-20-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	0.33 U	1.6	28 Y	0.6 UY	6 UY	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	31 Y	0.33 U	0.33 U	6 UY	6 Y	23 Y	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	0.33 U	0.33 U	6 UY	0.6 UY	6 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 UY	0.33 U	0.33 U	6 UY	0.6 UY	6 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	31*	0.33 U	1.6	28*	6	23*	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-105-18 03/20/18 12 - 14 SB-105-18_(12-14) (03-20-2018)	SB-105-18 03/20/18 14 - 16 SB-105-18_(14-16) (03-20-2018)	SB-105-18 03/20/18 16 - 18 SB-105-18_(16-18) (03-20-2018)	SB-105-18 03/20/18 18 - 20 SB-105-18_(18-20) (03-20-2018)	SB-105-18 03/20/18 20 - 22 SB-105-18_(20-22) (03-20-2018)	SB-105-18 03/20/18 22 - 24 SB-105-18_(22-24) (03-20-2018)
Detected PCBs																
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	3 UY	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	20 Y	0.6
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	3 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	3 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	20*	0.6

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-105-18 03/20/18 24 - 25 SB-105-18_(24-25) (03-20-2018)	SB-106-18 03/20/18 0 - 2 SB-106-18_(0-2) (03-20-2018)	SB-106-18 03/20/18 2 - 4 SB-106-18_(2-4) (03-20-2018)	SB-106-18 03/20/18 4 - 6 SB-106-18_(4-6) (03-20-2018)	SB-106-18 03/20/18 6 - 8 SB-106-18_(6-8) (03-20-2018)	SB-106-18 03/20/18 8 - 10 SB-106-18_(8-10) (03-20-2018)	SB-106-18 03/20/18 10 - 12 SB-106-18_(10-12) (03-20-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 Y	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-106-18 03/20/18 12 - 14 SB-106-18_(12-14) (03-20-2018)	SB-106-18 03/20/18 14 - 16 SB-106-18_(14-16) (03-20-2018)	SB-106-18 03/20/18 16 - 18 SB-106-18_(16-18) (03-20-2018)	SB-106-18 03/20/18 18 - 20 SB-106-18_(18-20) (03-20-2018)	SB-107-18 03/21/18 0 - 2 SB-107-18_(0-2) (03-21-2018)	SB-107-18 03/21/18 2 - 4 SB-107-18_(2-4) (03-21-2018)	SB-107-18 03/21/18 4 - 6 SB-107-18_(4-6) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.5 UY	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	4 Y	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.5 UY	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.5 UY	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	4	0.33 U	0.33 U	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-107-18 03/21/18 6 - 8 SB-107-18_(6-8) (03-21-2018)	SB-107-18 03/21/18 8 - 10 SB-107-18_(8-10) (03-21-2018)	SB-107-18 03/21/18 10 - 12 SB-107-18_(10-12) (03-21-2018)	SB-107-18 03/21/18 12 - 14 SB-107-18_(12-14) (03-21-2018)	SB-107-18 03/21/18 14 - 16 SB-107-18_(14-16) (03-21-2018)	SB-107-18 03/21/18 16 - 18 SB-107-18_(16-18) (03-21-2018)	SB-107-18 03/21/18 18 - 20 SB-107-18_(18-20) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	1 UY	2 UY	5 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	1.7 [2.1]	0.33 U	1	6 Y	5.4 Y	15 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	1 UY	2 UY	5 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	1 UY	2 UY	5 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	1.7 [2.1]	0.33 U	1	6	5.4	15

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-107-18 03/21/18 20 - 22 SB-107-18_(20-22) (03-21-2018)	SB-107-18 03/21/18 22 - 24 SB-107-18_(22-24) (03-21-2018)	SB-108-18 03/21/18 0 - 2 SB-108-18_(0-2) (03-21-2018)	SB-108-18 03/21/18 2 - 4 SB-108-18_(2-4) (03-21-2018)	SB-108-18 03/21/18 4 - 6 SB-108-18_(4-6) (03-21-2018)	SB-108-18 03/21/18 6 - 8 SB-108-18_(6-8) (03-21-2018)	SB-108-18 03/21/18 8 - 10 SB-108-18_(8-10) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U [0.33 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.7 [0.4]	0.6	0.33 U	0.33 U	0.33 U	0.33 U [0.4]	0.33 U [0.33 U]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.5 [0.33 U]	0.33 U [0.6]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U [0.33 U]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.7 [0.4]	0.6	0.33 U	0.33 U	0.33 U	0.5 [0.4]	0.33 U [0.6]

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-108-18 03/21/18 10 - 12 SB-108-18_(10-12) (03-21-2018)	SB-108-18 03/21/18 12 - 14 SB-108-18_(12-14) (03-21-2018)	SB-109-18 03/21/18 0 - 2 SB-109-18_(0-2) (03-21-2018)	SB-109-18 03/21/18 2 - 4 SB-109-18_(2-4) (03-21-2018)	SB-109-18 03/21/18 4 - 6 SB-109-18_(4-6) (03-21-2018)	SB-109-18 03/21/18 6 - 8 SB-109-18_(6-8) (03-21-2018)	SB-109-18 03/21/18 8 - 10 SB-109-18_(8-10) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U [0.33 U]	0.5 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	2.7 Y	1.9	0.7 [0.5]	4.7 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U [0.33 U]	0.5 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U [0.33 U]	0.5 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	2.7	1.9	0.7 [0.5]	4.7

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-109-18 03/21/18 10 - 12 SB-109-18_(10-12) (03-21-2018)	SB-109-18 03/21/18 12 - 14 SB-109-18_(12-14) (03-21-2018)	SB-109-18 03/21/18 14 - 16 SB-109-18_(14-16) (03-21-2018)	SB-109-18 03/21/18 16 - 18 SB-109-18_(16-18) (03-21-2018)	SB-109-18 03/21/18 18 - 20 SB-109-18_(18-20) (03-21-2018)	SB-110-18 03/21/18 0 - 2 SB-110-18_(0-2) (03-21-2018)	SB-110-18 03/21/18 2 - 4 SB-110-18_(2-4) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.7 [0.6]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.7
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.7 [0.6]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.7

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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-110-18 03/21/18 4 - 6 SB-110-18_(4-6) (03-21-2018)	SB-110-18 03/21/18 14 - 16 SB-110-18_(14-16) (03-21-2018)	SB-110-18 03/21/18 16 - 18 SB-110-18_(16-18) (03-21-2018)	SB-111-18 03/21/18 0 - 2 SB-111-18_(0-2) (03-21-2018)	SB-111-18 03/21/18 2 - 4 SB-111-18_(2-4) (03-21-2018)	SB-111-18 03/21/18 4 - 6 SB-111-18_(4-6) (03-21-2018)	SB-111-18 03/21/18 6 - 8 SB-111-18_(6-8) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	6 UY [6 UY]	0.33 U [2 UY]	0.33 U	0.33 U	0.33 U	6 UY [6 UY]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.1	16 Y [16 Y]	1.8 [5 Y]	0.33 U	0.7	0.33 U	24 Y [25 Y]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	6 UY [6 UY]	0.33 U [2 UY]	0.33 U	0.33 U	0.33 U	6 UY [6 UY]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	6 UY [6 UY]	0.33 U [2 UY]	0.33 U	0.33 U	0.33 U	6 UY [6 UY]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.1	16 [16]*	1.8 [5]	0.33 U	0.7	0.33 U	24 [25]*

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-111-18 03/21/18 8 - 10 SB-111-18_(8-10) (03-21-2018)	SB-112-18 03/21/18 0 - 2 SB-112-18_(0-2) (03-21-2018)	SB-112-18 03/21/18 2 - 4 SB-112-18_(2-4) (03-21-2018)	SB-112-18 03/21/18 4 - 6 SB-112-18_(4-6) (03-21-2018)	SB-112-18 03/21/18 6 - 8 SB-112-18_(6-8) (03-21-2018)	SB-112-18 03/21/18 8 - 10 SB-112-18_(8-10) (03-21-2018)	SB-112-18 03/21/18 10 - 12 SB-112-18_(10-12) (03-21-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	11 UY	0.33 U	0.33 U	0.6	0.33 U	0.33 U	0.33 U [0.33 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	63 Y	0.33 U	0.5	0.33 U	0.33 U	1.5	0.33 U [0.33 U]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	11 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	11 UY	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	63*	0.33 U	0.5	0.6	0.33 U	1.5	0.33 U [0.33 U]

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-112-18 03/21/18 12 - 14 SB-112-18_(12-14) (03-21-2018)	SB-112-18 03/21/18 14 - 16 SB-112-18_(14-16) (03-21-2018)	SB-112-18 03/21/18 16 - 18 SB-112-18_(16-18) (03-21-2018)	SB-112-18 03/21/18 18 - 20 SB-112-18_(18-20) (03-21-2018)	SB-112-18 03/21/18 20 - 22 SB-112-18_(20-22) (03-21-2018)	SB-112-18 03/21/18 22 - 24 SB-112-18_(22-24) (03-21-2018)
Detected PCBs																
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U

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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-112-18 03/21/18 24 - 25 SB-112-18_(24-25) (03-21-2018)	SB-113-18 03/22/18 0 - 2 SB-113-18_(0-2) (03-22-2018)	SB-113-18 03/22/18 2 - 4 SB-113-18_(2-4) (03-22-2018)	SB-113-18 03/22/18 4 - 6 SB-113-18_(4-6) (03-22-2018)	SB-113-18 03/22/18 6 - 8 SB-113-18_(6-8) (03-22-2018)	SB-113-18 03/22/18 8 - 10 SB-113-18_(8-10) (03-22-2018)	SB-113-18 03/22/18 10 - 12 SB-113-18_(10-12) (03-22-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.4]	0.33 U	0.8	0.5	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.5	0.33 U	0.6
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U [0.4]	0.33 U	0.8	0.5	0.5	0.33 U	0.6

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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-113-18 03/22/18 12 - 14 SB-113-18_(12-14) (03-22-2018)	SB-113-18 03/22/18 14 - 16 SB-113-18_(14-16) (03-22-2018)	SB-113-18 03/22/18 16 - 18 SB-113-18_(16-18) (03-22-2018)	SB-113-18 03/22/18 18 - 20 SB-113-18_(18-20) (03-22-2018)	SB-114-18 03/22/18 0 - 2 SB-114-18_(0-2) (03-22-2018)	SB-114-18 03/22/18 2 - 4 SB-114-18_(2-4) (03-22-2018)	SB-114-18 03/22/18 4 - 6 SB-114-18_(4-6) (03-22-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.9]	0.33 U	0.33 U	0.8	0.9	1.2
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.4	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U [0.9]	0.4	0.33 U	0.8	0.9	1.2

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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-114-18 03/22/18 6 - 8 SB-114-18_(6-8) (03-22-2018)	SB-114-18 03/22/18 8 - 10 SB-114-18_(8-10) (03-22-2018)	SB-114-18 03/22/18 10 - 12 SB-114-18_(10-12) (03-22-2018)	SB-114-18 03/22/18 12 - 14 SB-114-18_(12-14) (03-22-2018)	SB-114-18 03/22/18 14 - 16 SB-114-18_(14-16) (03-22-2018)	SB-114-18 03/22/18 16 - 18 SB-114-18_(16-18) (03-22-2018)	SB-114-18 03/22/18 18 - 20 SB-114-18_(18-20) (03-22-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	3 UY [6 UY]	6 UY	6 UY	6 UY	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	13 Y	11 Y [19 Y]	15 Y	28 Y	16 Y	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	3 UY [6 UY]	6 UY	6 UY	6 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	3 UY	3 UY [6 UY]	6 UY	6 UY	6 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	13	11 [19]*	15	28*	16*	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-114-18 03/22/18 20 - 22 SB-114-18_(20-22) (03-22-2018)	SB-114-18 03/22/18 22 - 24 SB-114-18_(22-24) (03-22-2018)	SB-115-18 03/22/18 0 - 2 SB-115-18_(0-2) (03-22-2018)	SB-115-18 03/22/18 2 - 4 SB-115-18_(2-4) (03-22-2018)	SB-115-18 03/22/18 4 - 6 SB-115-18_(4-6) (03-22-2018)	SB-115-18 03/22/18 6 - 8 SB-115-18_(6-8) (03-22-2018)	SB-115-18 03/22/18 10 - 12 SB-115-18_(10-12) (03-22-2018)
Detected PCBs																	
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	6 UY	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.3	15 Y	0.33 U	1.1	5 Y	0.33 U	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	6 UY	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	6 UY	0.33 U	0.33 U	0.6 UY	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.3	15	0.33 U	1.1	5	0.33 U	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-115-18 03/22/18 12 - 14 SB-115-18_(12-14) (03-22-2018)	SB-115-18 03/22/18 14 - 16 SB-115-18_(14-16) (03-22-2018)	SB-115-18 03/22/18 16 - 18 SB-115-18_(16-18) (03-22-2018)	SB-115-18 03/22/18 18 - 20 SB-115-18_(18-20) (03-22-2018)	SB-115-18 03/22/18 20 - 22 SB-115-18_(20-22) (03-22-2018)	SB-116-18 06/21/18 0 - 2 SB-116-18_(0-2)	SB-116-18 06/21/18 2 - 4 SB-116-18_(2-4)	SB-116-18 06/21/18 4 - 6 SB-116-18_(4-6)
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	37 Y
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	6 UY
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	37*

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-116-18 06/21/18 6 - 8 SB-116-18_(6-8)	SB-116-18 06/21/18 8 - 10 SB-116-18_(8-10)	SB-116-18 06/21/18 10 - 12 SB-116-18_(10-12)	SB-116-18 06/21/18 12 - 14 SB-116-18_(12-14)	SB-116-18 06/21/18 14 - 15 SB-116-18_(14-15)	SB-117-18 06/21/18 0 - 2 SB-117-18_(0-2)	SB-117-18 06/21/18 2 - 4 SB-117-18_(2-4)	SB-117-18 06/21/18 4 - 6 SB-117-18_(4-6)	SB-117-18 06/21/18 6 - 8 SB-117-18_(6-8)	SB-117-18 06/21/18 8 - 10 SB-117-18_(8-10)	SB-117-18 06/21/18 10 - 12 SB-117-18_(10-12)	SB-117-18 06/21/18 12 - 14 SB-117-18_(12-14)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	6 UY	0.33 U	2 UY	13 UY	7 UY	0.33 U	0.33 U	3.3 Y	75 Y	7 Y	21 Y	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	19 Y	0.33 U	2 UY	13 UY	34 Y	0.33 U	0.33 U	0.6 UY	11 UY	1 UY	3 UY	0.33 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	6 UY	1	7 Y	79 Y	7 UY	0.4	0.33 U	0.6 UY	11 UY	1 UY	3 UY	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	6 UY	0.33 U	2 UY	13 UY	7 UY	0.33 U	0.33 U	0.6 UY	11 UY	1 UY	3 UY	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	19*	1	7	79*	34*	0.4	0.33 U	3.3	75*	7	21*	0.33 U

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Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-117-18 06/21/18 14 - 16 SB-117-18_(14-16)	SB-117-18 06/21/18 16 - 18 SB-117-18_(16-18)	SB-117-18 06/21/18 18 - 20 SB-117-18_(18-20)	SB-118-18 06/21/18 0 - 2 SB-118-18_(0-2)	SB-118-18 06/21/18 2 - 4 SB-118-18_(2-4)	SB-118-18 06/21/18 4 - 6 SB-118-18_(4-6)	SB-118-18 06/21/18 8 - 10 SB-118-18_(8-10)	SB-118-18 06/21/18 12 - 14 SB-118-18_(12-14)	SB-118-18 06/21/18 16 - 18 SB-118-18_(16-18)	SB-118-18 06/21/18 18 - 20 SB-118-18_(18-20)	SB-118-18 06/21/18 20 - 22 SB-118-18_(20-22)	SB-119-18 06/21/18 0 - 2 SB-119-18_(0-2)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6 Y	12 Y	1.2	0.33 U	93 Y	13 Y	11 Y	61 UY	0.33 U	3 UY	0.33 U	0.33 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	2 UY	0.33 U	0.33 U	16 UY	2 UY	2 UY	345 Y	0.33 U	11 Y	0.33 U	1.3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	2 UY	0.33 U	0.33 U	16 UY	2 UY	2 UY	61 UY	0.33 U	3 UY	0.33 U	0.33 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1 UY	2 UY	0.33 U	0.33 U	16 UY	2 UY	2 UY	61 UY	0.33 U	3 UY	0.33 U	0.33 U
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	6	12	1.2	0.33 U	93*	13	11	345*	0.33 U	11	0.33 U	1.3

See Notes on last page.

Soil SB Analytical PCB Memos
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-119-18 06/21/18 2 - 4 SB-119-18_(2-4)	SB-119-18 06/21/18 4 - 6 SB-119-18_(4-6)	SB-119-18 06/21/18 6 - 8 SB-119-18_(6-8)	SB-119-18 06/21/18 8 - 10 SB-119-18_(8-10)	SB-119-18 06/21/18 10 - 12 SB-119-18_(10-12)	SB-119-18 06/21/18 12 - 14 SB-119-18_(12-14)	SB-119-18 06/21/18 14 - 15 SB-119-18_(14-15)	SB-120-18 06/21/18 0 - 2 SB-120-18_(0-2)	SB-120-18 06/21/18 2 - 4 SB-120-18_(2-4)	SB-120-18 06/21/18 4 - 6 SB-120-18_(4-6)	SB-120-18 06/21/18 6 - 8 SB-120-18_(6-8)	SB-120-18 06/21/18 8 - 10 SB-120-18_(8-10)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.9	0.33 U	0.33 U [0.33 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2	0.5 [0.33 U]	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.5 [0.33]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U [0.33 U]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2	0.5 [0.33 U]	0.33 U	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.9	0.33 U	1.5 [0.33]

See Notes on last page.

Soil SB Analytical PCB Memos
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Depth(ft): Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SB-120-18 06/21/18 10 - 12 SB-120-18_(10-12)	SB-120-18 06/21/18 12 - 14 SB-120-18_(12-14)	SB-120-18 06/21/18 14 - 15 SB-120-18_(14-15)	SB-121-18 06/22/18 0 - 2 SB-121-18_(0-2)	SB-121-18 06/22/18 2 - 4 SB-121-18_(2-4)	SB-121-18 06/22/18 4 - 6 SB-121-18_(4-6)	SB-121-18 06/22/18 6 - 8 SB-121-18_(6-8)	SB-121-18 06/22/18 8 - 10 SB-121-18_(8-10)	SB-121-18 06/22/18 10 - 12 SB-121-18_(10-12)	SB-121-18 06/22/18 12 - 14 SB-121-18_(12-14)	SB-121-18 06/22/18 14 - 16 SB-121-18_(14-16)	SB-121-18 06/22/18 16 - 18 SB-121-18_(16-18)
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]	0.33 U	0.33 U	0.6	6 UY [6 UY]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33	0.2	1.1	3.5 Y	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	48 Y [55 Y]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]	0.33 U	0.33 U	0.33 U	6 UY [6 UY]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.6 UY	0.33 U [0.33 U]	0.4	0.33 U	0.33 U	6 UY [6 UY]
Aroclor-1268	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.33 U	0.33	0.33 U	0.33	0.2	1.1	3.5	0.33 U [0.33 U]	0.4	0.33 U	0.6	48 [55]*

See Notes on last page.

Soil SB Analytical PCB Memos
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
	Exceeds MDEQ 2013 Soil Saturation Concentration Screening Level
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft	feet
GSWI	Groundwater Surface Water Interface
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit
Y	Elevated reporting limit due to high target concentration

Table 4-3 SHI Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	GWD8 0.8 - 2 06/13/01 GWD8-S(0-2)-061301	GWD8 4 - 6 06/13/01 GWD8-S(4-6)-061301
Detected Inorganics												
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	910	**- -**	- -	4.34	2.54
Barium	75	75	130,000	1,300	1,300	440	- -	150,000	**- -**	- -	10.2	94.6
Beryllium	- -	- -	1,600	51	51	84	- -	590	**- -**	- -	0.17	1.32
Cadmium	- -	1.2	2,100	6	6	3	- -	2,200	**- -**	- -	0.298 J	0.39 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	240	**- -**	- -	15.8	50.4
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	5,900	**- -**	- -	3.76	2.47
Copper	- -	32	73,000	5,800	5,800	73	- -	59,000	**- -**	- -	15.1	38.5
Lead	33.2	21	900	700	700	2,500	- -	44,000	**- -**	- -	19.9	6.17
Manganese	631	440	90,000	1	1	26	- -	1,500	**- -**	- -	305	1,350
Mercury	- -	0.13	580	1.7	1.7	0.05	62	8,800	**89**	- -	0.0241 J	0.0137 J
Nickel	29	20	150,000	100	100	76	- -	16,000	**- -**	- -	14.4	26.7
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	**- -**	- -	1.05 U	0.571 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	**- -**	- -	9.21	8.08
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	**- -**	- -	18.6	7.55

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-3 SHI Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	GWD8 0.8 - 2 06/13/01 GWD8-S(0-2)-061301	GWD8 4 - 6 06/13/01 GWD8-S(4-6)-061301
Detected Solids													
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	95.5	87.7

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-3 SHI PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	GWD8 0.8 - 2 06/13/01 GWD8-S(0-2)-061301R2	GWD8 4 - 6 06/13/01 GWD8-S(4-6)-061301R2
Detected PCBs													
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-3 SHI VOC-SVOC Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	GWD8 0.8 - 2 06/13/01 GWD8-S(0-2)-061301	GWD8 0.8 - 2 06/13/01 GWD8-S(0-2)-061301DL	GWD8 4 - 6 06/13/01 GWD8-S(4-6)-061301	GWD8 4 - 6 06/13/01 GWD8-S(4-6)-061301DL
Detected Volatile Organics														
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	0.0051 U	NA	0.00085 J
Detected Semivolatile Organics														
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.35 U	NA	0.14 J	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.35 U	NA	1.7	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.35 U	NA	0.094 J	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.35 U	NA	0.2 J	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.35 U	NA	0.13 J	NA

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BD-6 0.3 - 2 09/25/01 BD6-S(0-2)	BD-6 8 - 10 09/25/01 BD6-S(8-10)	BD-6 76 - 78 09/26/01 BP6-S(76-78)	BD-6 98 - 100 09/26/01 BP6-S(98-100)	BD-6 134 - 136 09/27/01 BD6-S(134-136)-N	BW1-01 0 - 2 07/16/01 BW1-01-S(0-2)-N	BW1-01 8 - 10 07/16/01 BW1-01-S(8-10)-N	BW1-02 0 - 2 07/16/01 BW1-02-S(0-2)-N	BW1-02 8 - 10 07/16/01 BW1-02-S(8-10)-N	BW1-03 0 - 2 07/16/01 BW1-03-S(0-2)-N	BW1-03 4 - 6 07/16/01 BW1-03-S(4-6)-N	BW1-04 0 - 2 07/16/01 BW1-04-S(0-2)-N
Detected Inorganics																						
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.19 U	2.23 U	2.36 U	2.24 U	0.546 U	0.526 U	35	5.1 U	0.836 J	1.88 J	6.74 J	2.46 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	2.86	1.79	4.76	1.5	3.44	4	19.1	8.98	5.99	5.69	35.4	6.48
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	12.5 J	11.4 J	18.8 J	7.04 J	18.3	25.1	3,830	296	161	38	256	65.9
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.11 U	0.111 U	0.118 U	0.112 U	0.175	0.0493 U	0.0617 U	0.0479 U	0.103 J	0.162	0.0524 U	0.395
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.117 J	0.0561 J	0.591 U	0.56 U	0.15 J	0.378 J	15.6	3.37 J	0.961	1.92	2.02 J	5.77
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	8.78	7.07	9.13	3.04	6.63	9.71 J	*1,520*	180	37.8	104	*639*	117
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	2.07	1.44	3.66	1.32	3.09	4.41 J	37.9	9.14	5.6	4.16	24.9	4.17
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	10.4	8.08	9.55	3.54	8.19	13.6	4,700	189	45.6	91.4	1,060	134
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	0.182 U	1.53	2.81	0.955	0.232 J	1.59	0.637
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	9.24	6.17	4.52	1.92	3.13	7.22	3,950*	109	55.1	126	141	266
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	162	111	210	114	230	273	1,070	*6,330*	471	1,320	*4,250*	*2,090*
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0362 U	0.0367 U	0.039 U	0.037 U	0.025 J	0.009 U	0.549	0.3	0.382	0.0474	0.786	0.114
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	7.51	7.32	10.1	3.24	7.68	10.6 J	349	93.9	35.8	38	528	40.8
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.548 U	0.557 U	0.591 U	0.56 U	0.345 U	0.333 U	1.34 J	3.23 U	0.368 U	0.319 U	0.353 U	0.355 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.548 U	0.557 U	0.591 U	0.56 U	0.167 U	0.161 U	69.6	1.56 U	0.178 U	0.36 J	1.43 J	0.63
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	1.1 U	1.11 U	0.832 J	0.618 J	0.557 U	0.536 U	0.671 U	7.72 J	0.593 U	0.514 U	0.57 U	0.923 J
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	7.08	6.66	10.4	4.23	8.16	13.1	32.3	21	13.8	7.3	30	6.35
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	19	7.74	26.2	10.4	39.1	46 J	1,660	191	58.1	936	145	7,400

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-04 8 - 10 07/16/01 BW1-04-S(8-10)-N	BW1-04 12 - 14 07/16/01 BW1-04-S(12-14)-N	BW1-05 0 - 2 01/09/02 BW1-05-S(0-2)DL	BW1-05 8 - 10 01/09/02 BW1-05-S(8-10)DL	BW1-05 25 - 27 01/09/02 BW1-05-S(25-27)DL	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)	BW1-07 0 - 2 01/09/02 BW1-07-S(0-2)DL	BW1-07 8 - 10 01/09/02 BW1-07-S(8-10)DL	BW1-07 11 - 13 01/09/02 BW1-07-S(11-13)DL
Detected Inorganics																					
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	1.54 J	0.562 U	NA	NA	NA	0.481 J	2.1 U	2.15 U	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	7.54	1.09	NA	NA	NA	3.91	3.45	2.5	NA	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	14	8.36	NA	NA	NA	23.8 J	10.2 J	43.3 J	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0519 U	0.0527 U	NA	NA	NA	0.105 U	0.105 U	0.107 U	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.153 J	0.125 J	NA	NA	NA	0.391 J	0.207 J	0.145 J	NA	NA	NA
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	114	7.12	*272*	13.7	144	12	6.52	4.44	*377*	55.2	17.2
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	4.94	0.97 J	NA	NA	NA	3.22	2.43	1.62	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	60.1	4.55	NA	NA	NA	37.8	12.3	16.1	NA	NA	NA
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	0.192 U	0.195 U	NA	NA	NA	0.526 U	0.525 U	0.537 U	NA	NA	NA
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	17.1	6.46	NA	NA	NA	16.3	5.52	4.5	NA	NA	NA
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	659	160	*1,900*	334	877	216	212	148	*4,620*	1,020	307
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0095 U	0.0096 U	NA	NA	NA	0.0138 J	0.0228 J	0.0229 J	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	62.9	4.6	NA	NA	NA	14.2	7.67	6.47	NA	NA	NA
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.557 J	0.355 U	NA	NA	NA	0.526 U	0.525 U	0.537 U	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.169 U	0.172 U	NA	NA	NA	0.526 U	0.525 U	0.537 U	NA	NA	NA
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	0.564 U	0.573 U	NA	NA	NA	0.272 J	0.444 J	0.423 J	NA	NA	NA
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	12.5	4.61	NA	NA	NA	6.72	6.25	4.89	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	55.6	7.98	NA	NA	NA	54.6	25.7	18.8	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-08 1 - 2 01/07/02 BW1-08-S(0-2)DL	BW1-08 8 - 10 01/07/02 BW1-08-S(8-10)DL	BW1-08 11 - 13 01/07/02 BW1-08-S(11-13)DL	BW1-09 1 - 2 01/11/02 BW1-09-S(0-2)	BW1-09 1 - 2 01/11/02 BW1-09-S(0-2)DL	BW1-09 8 - 10 01/11/02 BW1-09-S(8-10)	BW1-09 19 - 21 01/11/02 BW1-09-S(19-21)	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)
Detected Inorganics																					
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	2.09 U	2.14 U	2.15 U	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	NA	NA	NA	NA	NA	NA	3.24	4.64	3.87	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	6.49 J	6.33 J	8.39 J	61.4 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.105 U	0.107 U	0.025 J	0.107 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.129 J	0.164 J	0.217 J	NA
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	97.7	25.1	123	95.2	NA	15.9	50.8	5.23	5.72	5.79	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.95	2.89	3.38	10.8
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	20	6.85	12.3	98.7
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.523 U	0.256 J	0.537 U	0.913
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	3.67	3.52	5.06	NA
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	1,100	1,300	*7,040*	NA	*3,670*	340	*1,540*	145	177	235	NA
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	NA	NA	NA	NA	0.0345 U	0.0353 U	0.0154 J	0.146
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	5.12	7.03	8.59	NA
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.523 U	0.535 U	0.537 U	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.523 U	0.535 U	0.537 U	0.275 J
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.519 J	0.46 J	0.486 J	NA
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	6.87	9.66	9.76	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	21.3	28.9	36.9	NA

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)DL	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)DL	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)R2	BW1-11A 0 - 2 07/30/03 BW111S(0-2)	BW1-11A 0 - 2 07/30/03 BW111S(0-2)DL	BW1-11A 6 - 8 07/30/03 BW111S(6-8)	BW1-11A 6 - 8 07/30/03 BW111S(6-8)DL	MWW1-01 4 - 6 08/06/01 BMWW1-01-S(4-6)-N	MWW1-01 8 - 10 08/06/01 BMWW1-01-S(8-10)-N
Detected Inorganics																				
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	1.17 J	NA	1.07 J	NA	NA	1.88 J	NA	3.37 J	0.569 U	0.577 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	5.71	NA	8.65	NA	NA	5.07	NA	15.7	3.19	3.9
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	175 J	NA	NA	48.7 J	NA	224 J	NA	12.4	28.9
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	0.112 U	NA	NA	0.282	NA	0.216	NA	0.0534 U	0.0934 J
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.933 J	NA	2.03 J	NA	NA	3.57 J	NA	R	0.0499 U	0.0507 U
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	52.8	NA	107	NA	NA	114	NA	*340*	6.53	9.94
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	9.13	NA	NA	3.85	NA	11.4	NA	2.47	4.8
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	315	NA	NA	112 J	NA	616 J	NA	8.62	10.1
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	1.97	NA	NA	NA	NA	NA	NA	0.197 U	0.2 U
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	46.3	NA	104	NA	NA	210 J	NA	41.9 J	6.49	31.5
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	498	NA	721	NA	NA	1,750 J	NA	*7,260 J*	256	244
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	0.29	0.074	NA	0.208	NA	0.0119 J	0.049
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	38.6	90.8	NA	NA	32.5	NA	103	NA	5.72	9.26
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	1.26 J	NA	1.07 J	NA	NA	2.71 U	NA	2.87 U	0.36 U	0.365 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	0.748	NA	NA	0.332 J	NA	NA	2.87 U	0.174 U	0.177 U
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	10.7 U	NA	2.07 J	NA	NA	5.42 U	NA	5.75 U	1.53	1.92
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	9.44 J	NA	13.6	NA	NA	6.55 J	NA	22.6 J	10.1	13.9
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	186	NA	647	NA	NA	3,670	NA	54.4	33.9	54

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW1-01 10 - 12 08/06/01 BMWW1-01-S(10-12)-N	MWW1-04 2 - 4 12/18/01 BMWW1-02-S(2-4)12180	MWW1-04 4 - 6 12/18/01 BMWW1-02-S(4-6)12180	MWW1-06 0 - 2 07/30/02 MWW1-06-S(0-2)	MWW1-06 2 - 4 07/30/02 MWW1-06-S(4)	SBDW16 16 - 18 12/15/95 SBDW16-16.0	SBDW18 34 - 36 12/20/95 SBDW18-34.0	SBDW19 36 - 38 12/15/95 SBDW19-36	SBDW20 40 - 42 12/19/95 SBDW20-40.0	SBDW21 18 - 20 12/19/95 SBDW21-18.0
Detected Inorganics																				
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	2,580	1,700 [1,340]	1,790	1,210 [1,200]	4,360
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.576 U	1.19 J	0.732 J	2.09 U	2.39 U	0.275 U	0.294 U [0.278 U]	0.378 U	0.295 U [0.298 U]	0.586 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	2.73	4.78	4.6	9	8.23	2.79	2.15 [3.16]	8.3	1.58 [1.71]	5.02
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	25.7	265 J	375 J	30.4 J	39.9 J	9.07	10.2 [7.18]	60.9	4.73 [4.59]	30.9
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0541 U	0.125	0.0681 J	0.297	0.35	0.165	0.353 U [0.334 U]	0.453 U	0.354 U [0.357 U]	0.352 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.0505 U	1.53	0.787	0.197 J	0.468 J	0.0632	0.0429 [0.0434]	0.0967	0.0473 [0.0423]	0.0774
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	75,400	51,300 [51,100]	10,100	35,700 [34,900]	23,700
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	8.8	31.6	16.9	9.08 J	13.6 J	3.81	3.81 [4.83]	3.55	3.26 [2.96]	8.01
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	3.97	3.89	3.17	NA	6.43	3.08	2.94 U [2.78 U]	3.78 U	2.95 U [2.98 U]	5.86
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	10.3	25	16.1	16.1 J	21.3 J	6.32	4 [4.14]	15.7	6.18 [3.74]	9.97
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	0.2 U	1.3	1.32	NA	NA	0.27 U	1.9 [0.28 U]	0.38 U	0.3 U [0.3 U]	0.29 U
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	5,540	3,620 [3,020]	10,800	2,950 [2,820]	8,670
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	6.95	71.9	71.7	NA	28.1	1.68	1.8 [1.84]	2.26	2.27 [1.83]	4.77
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	NA	NA	NA	NA	NA	23,900	10,100 [9,220]	10,700	7,810 [7,170]	13,600
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	382	257	198	267 J	274 J	179	124 [110]	340	93.5 [95.1]	192
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0099 U	0.329 J	0.184 J	0.0307 J	0.0394 U	0.055 U	0.0588 U [0.0557 U]	0.0756 U	0.0591 U [0.0596 U]	0.0586 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	9.28	17.3	8.54	11.9	13.1	7.04	4.41 [4.57]	6.95	5.14 [4.65]	11.3
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	550 U	588 U [557 U]	756 U	591 U [596 U]	586 U
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.364 U	0.608 U	0.598 U	0.523 U	0.598 U	0.275 U	0.294 U [0.278 U]	0.378 U	0.295 U [0.298 U]	0.586 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.176 U	0.608 U	0.598 U	0.523 U	0.598 U	0.275 U	0.294 U [0.278 U]	0.378 U	0.295 U [0.298 U]	0.293 U
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	464	336 [324]	404	406 [399]	274
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	1.93	1.22 U	0.577 J	1.05 U	1.2 U	0.275 U	0.294 U [0.278 U]	0.378 U	0.295 U [0.298 U]	0.293 U
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	11.8 U [11.9 U]	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	13.8	14.5	16.3	14.2	19.3	10.5	6.27 [5.61]	6.49	5.1 [4.62]	15.2
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	33.1	163	226	48.5	69.5	12.4	13.3 [14.1]	19.8	10.5 [9.59]	22.5

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBDW22 32 - 34 12/19/95 SBDW22-32.0	SBMW16 5 - 7 12/20/95 SBMW16-5.0	SBMW17 6 - 8 12/20/95 SBMW17-06.0	SBMW17 10 - 12 12/14/95 SBMW17-10.0	SBMW18 16 - 18 12/14/95 SBMW18-16.0	SBMW19 25 - 27 12/18/95 SBMW19-25	SBMW20 23 - 25 12/20/95 SBMW20-23.0	SBMW22 16 - 18 12/12/95 SBMW22-16.0	SBSB1 16 - 18 12/12/95 SBSB1-16.0	SBSB2 4 - 6 12/14/95 SBSB2-04.0	SBSB3 16 - 18 12/14/95 SBSB3-16.0	SBSB4 6 - 8 12/15/95 SBSB4-06.0	SBSB5 4 - 6 12/12/95 SBSB5-04.0	SBTT1 10 - 15 01/22/96 SBTT1-10.0
Detected Inorganics																									
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	2,000	1,870	1,600	625	2,670	1,660	1,850 [2,250]	8,220	1,660	10,800	2,070	6,580	3,910	2,740
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.394	0.228 U	0.664	0.45 U	0.467	1.41	1.01 [0.971]	150	0.295 U	1.16 U	0.271 U	0.341	1,740*	0.416
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	3.36	0.73	2.43	0.603	1.61	1.18	2.89 [2.28]	20	0.862	5.39	0.878	1.35	35.7	0.797
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	51.5	6.1	16.4	156	20.4	11.6	187 [267]	5,720	5.31	61.3	5.09	34.8	1,200	26.2 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.342 U	0.345 U	0.36 U	0.27 U	0.178	0.362 U	0.34 U [0.352 U]	1.05	0.177 U	0.58	0.163	0.439	1.72 U	0.425
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.114	0.0449	0.03 U	0.121	0.157	0.0301 U	0.997 [0.984]	3.51	0.0579	0.0622	0.049	0.0368	5.18	0.122
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	90,800	34,800	1,230	425,000	5,400	603 U	5,030 [3,430]	28,800	39,700	88,600	58,400	12,100	13,200	7,210
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	7.99	4.01	30.5	1.69	21.4	4.38	17.2 [14.2]	207	3.85	78.2	3.8	10.3	*1,020*	12.4 J
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	4.62	2.88 U	3 U	4.5 U	2.97 U	3.01 U	2.83 U [2.93 U]	29.2	2.95 U	6.73	2.71 U	3.07	34.6	2.66 U
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	18.7	4.96	55.8	2.79	28.4	3.2	143 [126]	1,110	4.19	14	3.3	15.5	729	8.5
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	0.29 U	0.29 U	0.62	0.45 U	0.3 U	0.3 U	1.9 [3.5]	3.1	0.3 U	0.29 U	0.27 U	0.27 U	4.1	0.48
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	7,500	3,020	16,300	2,060	9,980	4,050	10,600 [8,430]	120,000	3,360	14,800	4,400	14,200	376,000	6,660
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	8.52	2.25	6.17	0.9 U	113	70.2	112 [89.8]	1,350*	2.1	30.1	2.22	0.711	573	16.4 J
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	15,100	7,340	814	9,630	885	328	1,140 [1,100]	4,100	7,890	16,500	13,200	2,130	975	622 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	216	78.4	248	425	227	32.4	252 [170]	*3,900*	87.6	335	117	563	*3,510*	894
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0571 U	0.0576 U	0.06 U	0.09 U	0.0595 U	0.0603 U	0.647 [1.39]	1.56	0.059 U	0.058 U	0.0542 U	0.0548 U	2.23	0.0531 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	14.8	5.64	33.8	3.06	33.2	4.76	60.5 [47.8]	351	4.25	19.5	4.33	13.1	354	5.95 J
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	571 U	576 U	600 U	900 U	595 U	603 U	566 U [586 U]	737	590 U	2,690	542 U	551	574 U	531 U
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.285 U	0.228 U	0.3 U	0.45 U	0.339	0.301 U	0.386 [0.293 U]	1.94	0.295 U	1.16 U	0.271 U	0.274 U	7.67	0.37
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.285 U	0.288 U	0.3 U	0.45 U	0.297 U	0.301 U	0.283 U [0.293 U]	2.37	0.295 U	0.29 U	0.271 U	0.274 U	0.287 U	0.266 U
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	368	303	226	679	227	159	290 [371]	890	244	277	173	221	434	252 J
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	0.285 U	0.288 U	0.3 U	0.45 U	0.297 U	0.301 U	0.283 U [0.293 U]	0.329 U	0.295 U	0.29 U	0.271 U	0.274 U	0.287 U	0.266 U
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	11.4 U	NA	NA	NA	NA	NA	NA	NA	11.8 U	NA	NA	NA	51.3	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	6.25	6.78	5.29	1.8 U	7.31	4.85	4.89 [5.76]	37.1	6.91	24.7	9.15	14.6	61.4	6.73 J
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	28.9	13	7.91	3.96	23	7.9	68.4 [73.2]	4,040	11.5	45	13.1	5.37	932	43.7 J

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth(ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBTT2 15 - 01/22/96 SBTT2-15.0	SBTT3 5 - 9 01/23/96 SBTT3-5.0	SBTT4 3 - 10 01/23/96 SBTT4-3.0	SBTT5 3 - 5 01/23/96 SBTT5-3.0	SBWD1 14 - 16 12/18/95 SBWD1-14.0	SBWD2 24 - 26 12/18/95 SBWD2-24.0	SBWD3 24 - 26 12/18/95 SBWD3-24.0	SSTT1 0 - 0.5 01/22/96 SSTT1 (0-6)	SSTT2 0 - 0.5 01/22/96 SSTT2 (0-6)	SSTT3 0 - 0.5 01/22/96 SSTT3 (0-6)	SSTT4 0 - 0.5 01/22/96 SSTT4 (0-6)	SSTT5 0 - 0.5 01/23/96 SSTT5 (0-6)	TP-W1-01 7 - 09/06/01 TPW1-01	TP-W1-02 9 - 09/06/01 TPW1-02	TP-W1-03 10 - 09/06/01 TPW1-03
Detected Inorganics																									
Aluminum	- -	6,900	370,000	1	1	- -	- -	- -	- -	- -	1,890	6,200	2,750	3,950	3,600	2,880	2,600	3,450	4,250	1,790 J [3,270 J]	438	799 J [3,960 J]	NA	NA	NA
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.638	2.76	5.44	2.33	0.444 J	0.598 U	3.6	2.2 J	4.18 J	0.281 U [0.573 U]	22.5	16.6 J [2.94 J]	1.42 J	2.43 U	2.39 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	0.872	7.12	9.46	4.05	1.89	1.78	2.46	7.77 J	7.27 J	3.71 [3.65]	44.3*	67.1 J [3.35 J]*	5.47	2.95	5.75
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	18	306	32	78.4	26.1	32.2	14.6	45.2	79.1 J	12.8 J [34.4 J]	9.74	41.6 J [83.2 J]	45.7	49.2	52.9
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.319 U	0.614	0.314 U	0.655	0.318 U	0.359 U	0.359 U	0.416	0.753	0.337 U [0.344 U]	1.59 U	1.65 U [0.72 J]	0.0803 J	0.205	0.378
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.121	10.7	0.425	0.546	0.0694	0.0299 U	0.0503	2.11	2.32	0.132 [0.121]	0.129	0.206 [0.573]	0.658	0.607 U	0.597 U
Calcium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2,420	15,600	8,370	16,600	9,980 J	17,000	2,070	5,550 J	31,900	66,900 [89,700]	5,920	2,760 U [19,300 J]	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	9.82	161	*340*	143	20.3 J	13.8	10	81.9	*251*	4.48 J [11.7 J]	*1,660*	*940 J* [163 J]	39.2	37.4	19.2
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	2.66 U	11.3	14	6.17	2.65 U	2.99 U	2.99 U	6.66	11.8	5.11 [4.07]	64.4	69.5 J [4.82 J]	3.55 J	5.17	6.03
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	26.9	2,370	350	93.8	9.22	19.7	6.82	57.9 J	221	6.69 J [12.7 J]	1,590	987 J [82.7 J]	74.1	9.75	17.3
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	0.49	3.6	0.38	0.93	0.27 U	0.3 U	0.51	0.59	0.36	0.28 U [0.39]	0.27 U	0.37 [0.52]	0.362 J	1.75	1.65
Iron	- -	12,000	580,000	6	6	- -	- -	- -	- -	- -	6,090	69,400	14,200	68,800	6,280	7,430	7,830	69,000	10,700	10,500 [7,800]	64,800	70,000 J [52,300 J]	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	6.95	180	48.3	202	8.19	1,300*	94.1	151	117	3.32 J [5.81 J]	16.4	18.8 J [51.5 J]	135 J	8.67	12.5
Magnesium	- -	- -	1,000,000	8,000	22,000	- -	- -	*2,900,000*	- -	- -	730	3,460	623	1,380	749	913	524	1,230	3,490 J	8,160 J [12,000 J]	2,700	492 J [1,530 J]	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	107	*1,990*	*1,690*	*1,790*	936	223	120	*2,080*	*2,040*	543 J [270 J]	*4,490*	*4,600 J [1,530 J]*	818 J	*2,080*	511
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0821	0.156	0.0523 U	0.0546 U	0.053 U	0.0598 U	0.0599 U	0.0595 U	0.0921	0.0561 U [0.0573 U]	0.053 U	0.0551 U [0.0554 U]	0.0848	0.0238 J	0.0287 J
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	5.95	195	145	33.5	7.05	16.3	21.6	25 J	84.7 J	5.14 J [11.1 J]	601	557 J [44.7 J]	24.5 J	11.8	19.2
Potassium	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	532 U	744	523 U	546 U	530 U	598 U	599 U	616	579	777 [645]	530 U	551 U [554 U]	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.266 U	0.836	1.31 U	0.546 U	0.316 J	0.598 U	0.299 U	0.595 U	1.16 U	0.281 U [0.573 U]	5.3 U	5.51 U [0.554 U]	0.629 U	0.607 U	0.597 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.266 U	0.886	0.261 U	0.273 U	0.265 U	0.299 U	0.299 U	0.357	0.487	0.281 U [0.287 U]	0.382	0.447 [0.277 U]	0.629 U	0.607 U	0.597 U
Sodium	- -	- -	1,000,000	4,600	7,000	- -	- -	- -	- -	- -	624	616	209	468	546	268	2,490	382	675	210 [201]	109	110 U [440]	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	0.266 U	0.341 U	0.261 U	0.273 U	0.265 U	0.299 U	0.299 U	0.297 U	0.29 U	0.281 U [0.287 U]	0.265 U	0.276 U [0.277 U]	1.02 J	2.59	0.636 J
Tin	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	12 U	27	NA	11.2 U [11.5 U]	84	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	8.75	10.3	13.3	6.72	5.1	6.43	6.35	5.46	15	6.46 J [10.7 J]	46.4	52.7 J [7.4 J]	9.55	15.5	20.6
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	9.92	602	69.9	1,120	17.3 J	9.81	9.58	3,640	379	16.9 J [31.3 J]	99.8	66 J [1,370 J]	585 J	23.2	40.9

See Notes on last page.

Table 4-19 W-01 Inorganic Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Footnotes:

*	Result exceeds Direct Contact criteria.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BD-6 0.3 - 2 09/25/01 BD6-S(0-2)	BD-6 8 - 10 09/25/01 BD6-S(8-10)	BD-6 76 - 78 09/26/01 BP6-S(76-78)	BD-6 76 - 78 09/26/01 BP6-S(76-78)-N	BD-6 98 - 100 09/26/01 BP6-S(98-100)	BD-6 98 - 100 09/26/01 BP6-S(98-100)-N	BD-6 134 - 136 09/27/01 BD6-S(134-136)-N	BW1-01 0 - 2 07/16/01 BW1-01-S(0-2)	BW1-01 0 - 2 07/16/01 BW1-01-S(0-2)-N	BW1-01 8 - 10 07/16/01 BW1-01-S(8-10)
Detected Herbicides																					
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																					
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.4 U	NA	2,010
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	62	NA	33,580 J
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	11.4	NA	17,110 J
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	3.9 J	NA	3,560 J
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.46 J	NA	214
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.29 J	NA	317
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.07 U	NA	1,670
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	1.7 J	NA	2,820 J
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.07 U	NA	860
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA	2,320 J
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.08 U	NA	7.1 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA	414 J
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	1.8 J	NA	350
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.07 U	NA	853
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.07 U	NA	775
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.08 U	NA	132
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.05 U	NA	194
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	10.9 J	NA	8,530 J
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	35	NA	48,240 J
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	7.5 J	NA	7,330 J
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	12.4 J	NA	32,520 J
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	5.2 J	NA	10,230 J
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	1.8 J	NA	9,730 J
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	4.7 J	NA	16,080 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	1.5 J	NA	5,060 J
Detected Solids																					
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.3	89.8	84.7	NA	89.3	NA	NA	NA	NA	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	84.7	NA	89.3	89.8	NA	93.2	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-01 8 - 10 07/16/01 BW1-01-S(8-10)-N	BW1-02 0 - 2 07/16/01 BW1-02-S(0-2)	BW1-02 0 - 2 07/16/01 BW1-02-S(0-2)-N	BW1-02 8 - 10 07/16/01 BW1-02-S(8-10)	BW1-02 8 - 10 07/16/01 BW1-02-S(8-10)-N	BW1-03 0 - 2 07/16/01 BW1-03-S(0-2)	BW1-03 0 - 2 07/16/01 BW1-03-S(0-2)-N	BW1-03 4 - 6 07/16/01 BW1-03-S(4-6)	BW1-03 4 - 6 07/16/01 BW1-03-S(4-6)-N	BW1-04 0 - 2 07/16/01 BW1-04-S(0-2)
Detected Herbicides																					
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																					
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																					
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	697	NA	9.2 U	NA	61.7	NA	2,470	NA	8.5 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,980	NA	140	NA	1,470	NA	2,310	NA	293
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,150	NA	45.7	NA	312	NA	2,950 J	NA	53.2
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,040	NA	28.5	NA	35.8	NA	3,640 J	NA	13.3
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	42.4	NA	4.4 U	NA	3.8 J	NA	26.2 U	NA	2.3 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	4.9 U	NA	2.8 U	NA	3 J	NA	14.4 U	NA	1.5 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	55.5	NA	1.6 U	NA	11	NA	9.4 U	NA	5.6
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	100	NA	2.6 U	NA	45.2	NA	275	NA	8.7
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	29.3	NA	1.5 U	NA	4.6 J	NA	128 J	NA	2.6 J
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	38.1	NA	2.6 U	NA	16.5	NA	13.4 U	NA	1.4 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3.2 U	NA	1.9 U	NA	0.4 U	NA	11.5 U	NA	1 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3.5 U	NA	2.1 U	NA	0.3 U	NA	11.8 U	NA	1.3 J
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	353 J	NA	139 J	NA	8	NA	9.1 U	NA	4.7 J
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	59.3	NA	1.6 U	NA	5.7	NA	9.7 U	NA	2.7 J
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	15	NA	1.5 U	NA	7.6	NA	8.8 U	NA	5 J
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.7 U	NA	1 U	NA	0.2 U	NA	7.7 U	NA	0.57 J
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	15 U	NA	14.5 U	NA	16.3	NA	4.6 U	NA	11.2
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3,260 J	NA	53.1	NA	86.9 J	NA	12,580 J	NA	29.1
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3,580 J	NA	96.4	NA	1,010	NA	8,450 J	NA	122
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,730 J	NA	46.5 J	NA	80.6 J	NA	4,540 J	NA	32.3
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	794	NA	17.2 J	NA	368 J	NA	2,500	NA	61.7 J
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,070 J	NA	340 J	NA	88.1 J	NA	744 J	NA	61.4 J
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	80.2 J	NA	4.3 J	NA	25.5 J	NA	204	NA	15.2 J
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	2,420 J	NA	921 J	NA	169 J	NA	2,270 J	NA	148 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	8.7 J	NA	8.3 J	NA	13.9 J	NA	7.7 U	NA	16.5 J
Detected Solids																					
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	74.6	NA	96.1	NA	84.3	NA	97.3	NA	87.7	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-04 0 - 2 07/16/01 BW1-04-S(0-2)-N	BW1-04 8 - 10 07/16/01 BW1-04-S(8-10)	BW1-04 8 - 10 07/16/01 BW1-04-S(8-10)-N	BW1-04 12 - 14 07/16/01 BW1-04-S(12-14)	BW1-04 12 - 14 07/16/01 BW1-04-S(12-14)-N	BW1-05 0 - 2 01/09/02 BW1-05-S(0-2)	BW1-05 0 - 2 02/11/02 BW1-05-S(0-2)021102	BW1-05 8 - 10 01/09/02 BW1-05-S(8-10)	BW1-05 25 - 27 01/09/02 BW1-05-S(25-27)
Detected Herbicides																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																				
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																				
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	2.7 U	NA	1.6 U	NA	NA	47.9	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3.4 U	NA	2 U	NA	NA	679	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.2 U	NA	0.7 U	NA	NA	78.8	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.5 U	NA	0.3 U	NA	NA	50.9	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.7 U	NA	0.4 U	NA	NA	2.8 J	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.5 U	NA	0.3 U	NA	NA	0.95 J	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	NA	12.7	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.4 U	NA	0.2 U	NA	NA	6.9	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	NA	5	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.4 U	NA	0.2 U	NA	NA	4.6 J	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.3 U	NA	0.2 U	NA	NA	0.68 J	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.3 U	NA	0.2 U	NA	NA	1.6 J	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.46 J	NA	0.1 U	NA	NA	2.8 J	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	NA	6.3	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	NA	5.5	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	NA	0.69 J	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.72 J	NA	0.61 J	NA	NA	2.7	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.6 U	NA	0.3 U	NA	NA	116	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.2 U	NA	2.6	NA	NA	236	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.3 U	NA	1 J	NA	NA	85 J	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.3 J	NA	1.8 J	NA	NA	62.7 J	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.89 J	NA	4.4 J	NA	NA	73.1 J	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.3 U	NA	0.2 U	NA	NA	14.6 J	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	5.5 J	NA	8.8 J	NA	NA	82.9 J	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.32 J	NA	0.95 J	NA	NA	11 J	NA	NA
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	90.8	NA	78.4	87.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.3	NA	88.7	NA	87.2	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth(ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)-011102	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)-011102	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)-011102	BW1-07 0 - 2 01/09/02 BW1-07-S(0-2)	BW1-07 8 - 10 01/09/02 BW1-07-S(8-10)	BW1-07 11 - 13 01/09/02 BW1-07-S(11-13)
Detected Herbicides																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																				
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																				
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	40.1	NA	27.4	NA	8 J	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	771 J	NA	439	NA	196 J	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	126 J	NA	69.1	NA	32.3	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	46.2	NA	20.5	NA	8.3	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.6 J	NA	3.5 J	NA	0.41 J	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1 J	NA	0.1 U	NA	0.06 U	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	6.2	NA	3.5	NA	0.06 U	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	12.7	NA	4 J	NA	0.06 U	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.1 U	NA	0.1 U	NA	0.06 U	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	6.2	NA	0.1 U	NA	0.06 U	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.2 U	NA	0.1 U	NA	0.07 U	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.05 U	NA	0.04 U	NA	0.41 J	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.04 U	NA	0.74	NA	0.02 U	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.1 U	NA	4 J	NA	0.06 U	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	4.7	NA	1.6	NA	0.68 J	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.4	NA	0.26	NA	0.23 J	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	4	NA	0.71	NA	0.94	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	117 J	NA	42.8	NA	21.1 J	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.4 U	NA	133	NA	68.9 J	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	73.6 J	NA	23.4 J	NA	13.8 J	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	106 J	NA	37.6 J	NA	22.3 J	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	64.6 J	NA	16.6	NA	10.6 J	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	154 J	NA	16.1 J	NA	3.4 J	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	96.6 J	NA	16.6 J	NA	14.5 J	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	9.8 J	NA	2.6 J	NA	2.5 J	NA	NA	NA
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	95.1	NA	95.3	NA	93.2	NA	85.1	91.5	92.1
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-08 1 - 2 01/07/02 BW1-08-S(0-2)	BW1-08 8 - 10 01/07/02 BW1-08-S(8-10)	BW1-08 11 - 13 01/07/02 BW1-08-S(11-13)	BW1-09 1 - 2 01/11/02 BW1-09-S(0-2)	BW1-09 8 - 10 01/11/02 BW1-09-S(8-10)	BW1-09 19 - 21 01/11/02 BW1-09-S(19-21)	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)-011102	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)
Detected Herbicides																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																				
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																				
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	7 J	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	192	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	55.7 J	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	8	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	8.5	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.64 J	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	3.5 J	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.85	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	1.5 J	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.1 U	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	0.6	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	21.2 J	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	115	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	14.3 J	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	67.9 J	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	16.5 J	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	4.8 J	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	27.7 J	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	3 J	NA
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.2	91.3	89.0	85.6	91.0	87.0	95.6	NA	93.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)-011102	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)-011102	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)-0111	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)-0111	BW1-11 0.5 - 2 02/11/02 BW1-11-S(0-2)021102
Detected Herbicides																			
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																			
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.2 U	NA	0.1 U	NA	640	NA	195	41
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	14.6 J	NA	14.4 J	NA	8,970 J	NA	19,980 J	778
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	3.6 J	NA	3.5 J	NA	2,080 J	NA	7,500 J	108
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.91	NA	1.1 J	NA	683	NA	NA	43
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.08 U	NA	0.42 J	NA	73.3 U	NA	NA	2.1 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.08 U	NA	0.42	NA	30.6 U	NA	120 U	1.5 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.05 U	NA	0.04 U	NA	48.6	NA	NA	9.9
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.48 J	NA	0.07 U	NA	333	NA	1,590 J	10.8
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.05 U	NA	0.05 U	NA	25.3 U	NA	NA	4.5 J
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.08 U	NA	0.07 U	NA	108	NA	2,120 J	8.4
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.06 U	NA	0.05 U	NA	32.7 U	NA	NA	1 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.08 U	NA	0.07 U	NA	15.9 U	NA	51 U	2.1 J
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.12 J	NA	0.45 J	NA	12.2 UJ	NA	35.7 U	5.1
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.11 J	NA	0.33 J	NA	49.3	NA	NA	5
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.17 J	NA	0.05 U	NA	53.5	NA	151	6.7
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.1 J	NA	0.71 J	NA	9.2 U	NA	12.6 U	0.67 J
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.41 J	NA	0.37 J	NA	64.8 U	NA	64.8 U	5.1
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.3	NA	2.8	NA	2,520 J	NA	NA	103 J
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	8.4	NA	7.2	NA	5,370 J	NA	17,030 J	230
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	1.6 J	NA	2.6 J	NA	1,040 J	NA	NA	71.1
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	5.6 J	NA	5.1 J	NA	3,220	NA	31,160 J	90.1
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	1.6 J	NA	1.7 J	NA	302 J	NA	279 J	77.3 J
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.08 U	NA	0.99 J	NA	59.6 J	NA	169 J	20.1 J
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	3.6 J	NA	2 J	NA	734 J	NA	330 J	181 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	0.52 J	NA	1.1 J	NA	9.2 U	NA	12.6 U	16.9 J
Detected Solids																			
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	93.2	NA	93.6	NA	89.5	NA	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-11 8 - 10 02/11/02 BW1-11-S(8-10)2002	BW1-11 18 - 20 02/11/02 BW1-11-S(18-20)2002	BW1-11A 0 - 2 07/30/03 BW111S(0-2)	BW1-11A 6 - 8 07/30/03 BW111S(6-8)	BW1-12 1.5 - 3.5 03/18/05 BW1-12-S(0-2)-031805	BW1-12 8 - 10 03/18/05 BW1-12-S(8-10)-031805	BW1-13 0 - 2 03/18/05 BW1-13-S(0-2)-031805	BW1-13 8 - 10 03/18/05 BW1-13-S(8-10)-031805
Detected Herbicides																			
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																			
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																			
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.1 J	0.6 U	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	43.4	3.8 J	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	22.9	0.4 U	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	17.5	0.31 J	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	3.0 U	0.3 U	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.3 J	0.3 U	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	11.3	0.2 U	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	8.2	0.3 U	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.0 U	0.2 U	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.6 U	0.3 U	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.5 U	0.2 U	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	3.5 J	0.2 U	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	1.7 U	0.2 U	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	2.0 U	0.2 U	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	5.1	0.2 U	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	3.0 U	0.2 U	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	4.6	0.41 J	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	20.4 J	0.31 J	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	54.2	0.4 U	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	41.0	0.18 J	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	92.2 J	0.3 U	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	69.8 J	0.2 U	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	66.9 J	0.2 U	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	250 J	0.96 J	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	36.0	0.2 U	NA	NA	NA	NA	NA	NA
Detected Solids																			
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	92.3	87.0	95.3	78.8	83.1	88.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-13 20 - 22 03/18/05 BW1-13-S(20-22)-031805	BW1-13 23 - 25 03/18/05 BW1-13-S(23-25)-031805	BW1-14 0 - 2 03/17/05 BW1-14-S(0-2)-031705	BW1-14 8 - 10 03/17/05 BW1-14-S(8-10)-031705	BW1-14 20 - 22 03/17/05 BW1-14-S(20-22)-031705	BW1-14 23 - 25 03/17/05 BW1-14-S(23-25)-031705
Detected Herbicides																	
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																	
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Detected Solids																	
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.1	92.0	87.6	88.0	92.0	95.1
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-15 0 - 2 03/17/05 BW1-15-S(0-2)-031705	BW1-15 8 - 10 03/17/05 BW1-15-S(8-10)-031705	BW1-16 1.5 - 3.5 03/18/05 BW1-16-S(0-2)-031805	BW1-16 8 - 10 03/18/05 BW1-16-S(8-10)-031805	BW1-16 12 - 14 03/18/05 BW1-16-S(12-14)-031805	BW1-17 0 - 2 03/18/05 BW1-17-S(0-2)-031805	BW1-17 8 - 10 03/18/05 BW1-17-S(8-10)-031805
Detected Herbicides																		
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																		
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																		
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	85.7 [87]	82.6	94.3	84.8	77.9	87.1	87.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-17 20 - 22 03/18/05 BW1-17-S(20-22)-031805	BW1-17 23 - 25 03/18/05 BW1-17-S(23-25)-031805	BW1-18 0 - 2 03/18/05 BW1-18-S(0-2)-031805	BW1-18 8 - 10 03/18/05 BW1-18-S(8-10)-031805	BW1-18 20 - 22 03/18/05 BW1-18-S(20-22)-031805	BW1-18 23 - 25 03/18/05 BW1-18-S(23-25)-031805
Detected Herbicides																	
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																	
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA
Detected Solids																	
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	94.6	94.3	86.9	93.1	94.2	94.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-19 0 - 2 03/21/05 BW1-19-S(0-2)-032105	BW1-19 8 - 10 03/21/05 BW1-19-S(8-10)-032105	BW1-20 1.5 - 3.5 03/18/05 BW1-20-S(0-2)-031805	BW1-20 8 - 10 03/18/05 BW1-20-S(8-10)-031805	BW1-21 0 - 2 03/18/05 BW1-21-S(0-2)-031805	BW1-21 8 - 10 03/18/05 BW1-21-S(8-10)-031805	BW1-21 19 - 21 03/18/05 BW1-21-S(19-21)-031805
Detected Herbicides																		
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																		
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																		
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	81.5	84.7 [85.6]	87.3	81.3	86.9	88.7	92.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW1-21 22 - 24 03/18/05 BW1-21-S(22-24)-031805	BW1-22 0 - 2 03/21/05 BW1-22-S(0-2)-032105	BW1-22 8 - 10 03/21/05 BW1-22-S(8-10)-032105	BW1-22 20 - 22 03/21/05 BW1-22-S(20-22)-032105	BW1-22 23 - 25 03/21/05 BW1-22-S(23-25)-032105	BW1-23 0 - 2 03/21/05 BW1-23-S(0-2)-032105	BW1-23 8 - 10 03/21/05 BW1-23-S(8-10)-032105
Detected Herbicides																		
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																		
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																		
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.0	86.4	92.0	92.6	92.7	76.5	89.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW1-01 4 - 6 08/06/01 BMWW1-01-S(4-6)	MWW1-01 4 - 6 08/06/01 BMWW1-01-S(4-6)-N	MWW1-01 8 - 10 08/06/01 BMWW1-01-S(8-10)	MWW1-01 8 - 10 08/06/01 BMWW1-01-S(8-10)-N	MWW1-01 10 - 12 08/06/01 BMWW1-01-S(10-12)	MWW1-01 10 - 12 08/06/01 BMWW1-01-S(10-12)-N	MWW1-04 2 - 4 12/18/01 BMWW1-02-S(2-4)1218
Detected Herbicides																		
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																		
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Detected Dioxins/Furans																		
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	496	NA	133 J	NA	406	NA	91
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	1,920	NA	468	NA	1,140	NA	2,260
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	383	NA	115	NA	245	NA	459
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	467	NA	171	NA	400	NA	1.5 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	32.7 U	NA	41.1 U	NA	63.6 U	NA	8.5 J
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	18.1 U	NA	23.3 U	NA	22.3 U	NA	1.1 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	11.7 U	NA	18.3 U	NA	30.5 U	NA	24.1
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	34.8	NA	23.1 U	NA	23.2 U	NA	63.8
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	12.1 U	NA	19 U	NA	32.6 U	NA	9.9 J
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	17.8 U	NA	22.9 U	NA	21.7 U	NA	24.7 J
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	15.5 U	NA	24.3 U	NA	39.3 U	NA	0.8 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	12.4 U	NA	17 U	NA	12.9 U	NA	0.5 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	8.5 U	NA	12.2 U	NA	11.6 U	NA	53.8
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	12.6 U	NA	19.8 U	NA	31.6 U	NA	7.7 J
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	8 U	NA	11.5 U	NA	11.2 U	NA	56.7
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	6.4 U	NA	7.8 U	NA	6.3 U	NA	1.2 J
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	4.1 U	NA	4.5 U	NA	4.3 U	NA	163
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	1,680	NA	621	NA	1,690	NA	130 J
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	767	NA	249	NA	509	NA	1,280
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	549	NA	236	NA	503	NA	110 J
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	148	NA	23.1 U	NA	73.5	NA	486
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	8.3 U	NA	11.8 U	NA	11.4 U	NA	436
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	12.4 U	NA	17 U	NA	12.9 U	NA	18.3 J
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	4.1 U	NA	4.5 U	NA	28.7	NA	1,060
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	6.4 U	NA	7.8 U	NA	6.3 U	NA	9.8 J
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	86.1	NA	84.9	NA	85.1	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW1-04 2 - 4 12/18/01 BMWW1-02-S(2-4)12180	MWW1-04 4 - 6 12/18/01 BMWW1-02-S(4-6)1218	MWW1-04 4 - 6 12/18/01 BMWW1-02-S(4-6)12180	MWW1-06 0 - 2 07/30/02 MWW1-06-S(0-2)	MWW1-06 2 - 4 07/30/02 MWW1-06-S(4)	SBDW20 40 - 42 12/19/95 SBDW20-40.0	SBDW22 32 - 34 12/19/95 SBDW22-32.0	SBSB1 16 - 18 12/12/95 SBSB1-16.0	SBSB2 4 - 6 12/14/95 SBSB2-04.0
Detected Herbicides																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	- - [- -]	- -	NA	NA
Detected Miscellaneous																				
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	84.7	NA
Detected Dioxins/Furans																				
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	54.9	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1,290	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	244	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	27.4	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	2.9 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.5 UJ	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	14.3	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	30.7	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	6 J	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	11.1 J	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.1 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.6 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.6 U	NA	NA	NA	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	0.9 U	NA	NA	NA	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	37.2	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	1.1 J	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	113	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	80	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	494	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	61.3	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	202	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	334 J	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	3.9 J	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	780 J	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	10.2 J	NA	NA	NA	NA	NA	NA	NA
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	82.2	NA	83.6	95.6	83.7	NA	NA	NA	86.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth(ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SBSB3 16 - 18 12/14/95 SBSB3-16.0	SBSB4 6 - 8 12/15/95 SBSB4-06.0	SBSB5 4 - 6 12/12/95 SBSB5-04.0	SBTT1 10 - 15 01/22/96 SBTT1-10.0	SBTT2 15 - 01/22/96 SBTT2-15.0	SBTT3 5 - 9 01/23/96 SBTT3-5.0	SBTT4 3 - 10 01/23/96 SBTT4-3.0	SBTT5 3 - 5 01/23/96 SBTT5-3.0	SBWD3 24 - 26 12/18/95 SBWD3-24.0	SSTT1 0 - 0.5 01/22/96 SSTT1 (0-6)	SSTT2 0 - 0.5 01/22/96 SSTT2 (0-6)	SSTT3 0 - 0.5 01/22/96 SSTT3 (0-6)	SSTT4 0 - 0.5 01/22/96 SSTT4 (0-6)
Detected Herbicides																									
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Miscellaneous																									
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	59 U	NA	56 U [57 U]	100	
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	84.1	NA	89.1 [87.2]	94.3	
Detected Dioxins/Furans																									
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.35 U	NA	NA	NA	NA	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	7.4 U	NA	NA	NA	NA	
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.38 U	NA	NA	NA	NA	
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.18 U	NA	NA	NA	NA	
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.098 U	NA	NA	NA	NA	
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.25 U	NA	NA	NA	NA	
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.13 U	NA	NA	NA	NA	
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.26 U	NA	NA	NA	NA	
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.17 U	NA	NA	NA	NA	
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.48 U	NA	NA	NA	NA	
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.3 U	NA	NA	NA	NA	
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.14 U	NA	NA	NA	NA	
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.26 U	NA	NA	NA	NA	
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.27 U	NA	NA	NA	NA	
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.38 U	NA	NA	NA	NA	
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.17 U	NA	NA	NA	NA	
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.26 U	NA	NA	NA	NA	
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.58 U	NA	NA	NA	NA	
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	4.7 U	NA	NA	NA	NA	
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.26 U	NA	NA	NA	NA	
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA	NA	NA	NA	NA	0.26 U	NA	NA	NA	NA	
Detected Solids																									
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.3	91.17	NA	94.2	94	73.3	95.7	91.5	NA	NA	86.3	NA	NA	
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SSTT5 0 - 0.5 01/23/96 SSTT5 (0-6)	TP-W1-01 7 - 09/06/01 TPW1-01	TP-W1-02 9 - 09/06/01 TPW1-02	TP-W1-03 10 - 09/06/01 TPW1-03
Detected Herbicides															
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA
Detected Miscellaneous															
Sulfide	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	mg/kg	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA
Detected Dioxins/Furans															
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
2,3,7,8-TCDD	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	pg/g	NA	NA	NA	NA
Detected Solids															
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.7 [90.3]	79.5	82.4	83.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA

See Notes on last page.

Table 4-19 W-01 Misc. Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
mg/kg	milligram per kilogram
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
pg/g	picogram per gram
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BD-6 0.3 - 2 09/25/01 BD6-S(0-2)	BD-6 8 - 10 09/25/01 BD6-S(8-10)	BD-6 76 - 78 09/26/01 BP6-S(76-78)	BD-6 98 - 100 09/26/01 BP6-S(98-100)	BD-6 134 - 136 09/27/01 BD6-S(134-136)-N	BW1-01 0 - 2 07/16/01 BW1-01-S(0-2)-N	BW1-01 8 - 10 07/16/01 BW1-01-S(8-10)-N	BW1-02 0 - 2 07/16/01 BW1-02-S(0-2)-N	BW1-02 8 - 10 07/16/01 BW1-02-S(8-10)-N	BW1-03 0 - 2 07/16/01 BW1-03-S(0-2)-N	BW1-03 4 - 6 07/16/01 BW1-03-S(4-6)-N
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.037 U	0.039 U	0.037 U	0.03 U	0.057 U	0.71 U	0.028 U	0.0063 U	0.06	0.006 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.037 U	0.039 U	0.037 U	0.026 U	0.049 U	35	0.36	0.0055 U	0.0047 U	0.054
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.037 U	0.039 U	0.037 U	0.11 U	0.21 U	2.7 U	0.1 U	0.024 U	0.021 U	0.023 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.037 U	0.039 U	0.037 U	0.041 U	0.079 U	0.99 U	0.3	0.0088 U	0.087	0.071
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.037 U	0.039 U	0.037 U	0.11 U	0.21 U	35*	0.66	0.024 U	0.147	0.125

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-04 0 - 2 07/16/01 BW1-04-S(0-2)-N	BW1-04 8 - 10 07/16/01 BW1-04-S(8-10)-N	BW1-04 12 - 14 07/16/01 BW1-04-S(12-14)-N	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)DL	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)DL	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)DL
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.061 U	0.006 U	0.0061 U	0.17 U	0.069 U	0.035 U	0.035 U	0.035 U	0.035 U	3.5 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.11 J	0.0052 U	0.0053 U	0.94	0.53	0.14	0.22	0.051	0.092	54
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.23 U	0.023 U	0.023 U	0.17 U	0.069 U	0.035 U	0.035 U	0.035 U	0.035 U	3.5 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.085 U	0.0083 U	0.0085 U	0.13 J	0.069	0.034 J	0.017 J	0.035 U	0.035 U	5.8
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.11 J	0.023 U	0.023 U	1.07 J	0.599	0.174 J	0.237 J	0.051	0.092	59.8*

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)DL	BW1-11A 0 - 2 07/30/03 BW111S(0-2)	BW1-11A 6 - 8 07/30/03 BW111S(6-8)	BW1-12 1.5 - 3.5 03/18/05 BW1-12-S(0-2)-031805	BW1-12 8 - 10 03/18/05 BW1-12-S(8-10)-031805	BW1-13 0 - 2 03/18/05 BW1-13-S(0-2)-031805	BW1-13 8 - 10 03/18/05 BW1-13-S(8-10)-031805DL	BW1-13 20 - 22 03/18/05 BW1-13-S(20-22)-031805DL
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.036 U	0.038 U	0.035 U	0.042 U	0.04 U	0.19 U	0.72 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	22	0.14	0.063	0.035 U	0.042 U	0.04 U	0.68	4.9
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.036 U	0.089	0.035 U	0.042 U	0.036 J	0.19 U	0.72 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.5 J	0.093	0.038 U	0.011 J	0.042 U	0.04 U	0.28	0.72 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	23.5 J*	0.233	0.152	0.011 J	0.042 U	0.036 J	0.96	4.9

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-13 23 - 25 03/18/05 BW1-13-S(23-25)-031805DL	BW1-14 0 - 2 03/17/05 BW1-14-S(0-2)-031705	BW1-14 8 - 10 03/17/05 BW1-14-S(8-10)-031705	BW1-14 20 - 22 03/17/05 BW1-14-S(20-22)-031705DL	BW1-14 23 - 25 03/17/05 BW1-14-S(23-25)-031705DL	BW1-15 0 - 2 03/17/05 BW1-15-S(0-2)-031705	BW1-15 8 - 10 03/17/05 BW1-15-S(8-10)-031705DL
Detected PCBs																	
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.038 U	0.038 U	0.36 U	1.7 U	0.038 U [0.038 U]	40 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	12	0.41	0.038 U	1.7	8.2	0.025 J [0.034 J]	40 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.038 U	0.038 U	0.36 U	1.7 U	0.038 U [0.038 U]	290
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.086	0.038 U	0.18 J	0.96 J	0.021 J [0.019 J]	40 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	12	0.496	0.038 U	1.88 J	9.16 J	0.046 J [0.053 J]	290*

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MW-26-99 10 - 11 09/10/99 091099-KMV-06	MW-27-99 10 - 11 09/10/99 091099-KMV-07	MW-34-99 22 - 23 09/01/99 090199-KMV-04	MW-36-99 17 - 18 09/02/99 090299-KMV-05	MW-39-99 4 - 6 09/01/99 090199-KMV-02	MW-39-99 26 - 27 09/01/99 090199-KMV-03	MW-40-99 15 - 16 08/31/99 083199-KMV-01	MWW1-01 4 - 6 08/06/01 BMWW1-01-S(4-6)-N	MWW1-01 8 - 10 08/06/01 BMWW1-01-S(8-10)-N	MWW1-01 10 - 12 08/06/01 BMWW1-01-S(10-12)-N
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.062 U	0.012 U	0.062 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.01 U	0.01 U	3.7	4	0.01 U	1.8	0.01 U	3.3	0.59	1.7
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.6	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.23 U	0.047 U	0.24 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.01 U	0.01 U	0.01 U	0.01 U	4	0.01 U	0.01 U	0.086 U	0.017 U	0.087 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.6	0.02 U	3.7	4	4	1.8	0.02 U	3.3	0.59	1.7

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW1-04 2 - 4 12/18/01 BMWW1-02S(24)12180DL	MWW1-04 4 - 6 12/18/01 BMWW1-02S(46)12180DL	MWW1-06 0 - 2 07/30/02 MWW1-06-S(0-2)	MWW1-06 2 - 4 07/30/02 MWW1-06-S(4)	SBDW16 16 - 18 12/15/95 SBDW16-16.0	SBDW18 34 - 36 12/20/95 SBDW18-34.0	SBDW19 36 - 38 12/15/95 SBDW19-36.0	SBDW20 40 - 42 12/19/95 SBDW20-40.0	SBDW21 18 - 20 12/19/95 SBDW21-18.0	SBDW22 32 - 34 12/19/95 SBDW22-32.0	SBMW16 5 - 7 12/20/95 SBMW16-5.0
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4 U	0.39 U	0.035 U	0.039 U	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.19 U	0.19 U	0.19 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.9	4.4	0.035 U	0.039 U	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.19 U	0.19 U	0.19 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.4 U	0.39 U	0.035 U	0.039 U	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.19 U	0.19 U	0.19 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.66	0.71	0.035 U	0.039 U	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.19 U	0.19 U	0.19 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	5.56	5.11	0.035 U	0.039 U	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.19 U	0.19 U	0.19 U

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBMW17 6 - 8 12/20/95 SBMW17-06.0	SBMW17 10 - 12 12/14/95 SBMW17-10.0	SBMW18 16 - 18 12/14/95 SBMW18-16.0	SBMW19 25 - 27 12/18/95 SBMW19-25.0	SBMW20 23 - 25 12/20/95 SBMW20-23.0	SBMW22 16 - 18 12/12/95 SBMW22-16.0	SBSB1 16 - 18 12/12/95 SBSB1-16.0	SBSB2 4 - 6 12/14/95 SBSB2-04.0	SBSB3 16 - 18 12/14/95 SBSB3-16.0	SBSB4 6 - 8 12/15/95 SBSB4-06.0	SBSB5 4 - 6 12/12/95 SBSB5-04.0	SBTT1 10 - 15 01/22/96 SBTT1-10.0	SBTT2 15 - 01/22/96 SBTT2-15.0
Detected PCBs																							
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.3 U	0.2 U	0.2 U	3.8 U [3.9 U]	R	0.19 U	0.19 U	0.18 U	0.36 U	1.9 U	0.18 U	0.18 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.3 U	0.2 U	0.2 U	27 [31]	8.2 J	0.19 U	0.19 U	0.18 U	0.36 U	1.9 U	0.18 U	0.18 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.3 U	0.2 U	0.2 U	11 [12]	R	0.19 U	0.19 U	0.18 U	0.36 U	3.8 U	0.18 U	0.18 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.3 U	0.2 U	0.2 U	7.6 U [7.8 U]	R	0.19 U	0.19 U	0.18 U	0.36 U	3.8 U	0.18 U	0.18 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.2 U	0.3 U	0.2 U	0.2 U	38 [43]*	8.2 J	0.19 U	0.19 U	0.18 U	0.36 U	3.8 U	0.18 U	0.18 U

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBTT3 5 - 9 01/23/96 SBTT3-5.0	SBTT4 3 - 10 01/23/96 SBTT4-3.0	SBTT5 3 - 5 01/23/96 SBTT5-3.0	SBWD1 14 - 16 12/18/95 SBWD1-14.0	SBWD2 24 - 26 12/18/95 SBWD2-24.0	SBWD3 24 - 26 12/18/95 SBWD3-24.0	SSTT1 0 - 0.5 01/22/96 SSTT1 (0-6)	SSTT2 0 - 0.5 01/22/96 SSTT2 (0-6)	SSTT3 0 - 0.5 01/22/96 SSTT3 (0-6)	SSTT4 0 - 0.5 01/22/96 SSTT4 (0-6)	SSTT5 0 - 0.5 01/23/96 SSTT5 (0-6)	TP-W1-01 7 - 09/06/01 TPW1-01	TP-W1-02 9 - 09/06/01 TPW1-02	TP-W1-03 10 - 09/06/01 TPW1-03
Detected PCBs																								
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.3 U	0.17 U	0.18 U	0.17 U	0.4 U	0.2 U	0.2 U	0.19 U	0.19 U [0.19 U]	0.17 U	0.37 U [0.18 U]	0.041 U	0.04 U	0.039 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	13	0.83	0.18 U	0.17 U	2.4	0.2 U	0.2 U	0.71	0.19 U [0.19 U]	0.47	2 [0.18 U]	0.041 U	0.04 U	0.039 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	74	0.84	0.18 U	0.17 U	0.8 U	0.2 U	0.2 U	0.39 U	0.19 U [0.19 U]	0.52	1.1 J [0.18 U]	0.051	0.04 U	0.039 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.6 U	0.35 U	0.18 U	0.17 U	0.8 U	0.2 U	0.2 U	0.39 U	0.19 U [0.19 U]	0.17 U	0.74 U [0.18 U]	0.041 U	0.04 U	0.039 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	87	1.67	0.18 U	0.17 U	2.4	0.2 U	0.2 U	0.71	0.19 U [0.19 U]	0.99	3.1 J [0.18 U]	0.051	0.04 U	0.039 U

See Notes on last page.

Table 4-19 W-01 PCB Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
R	Rejected data
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth(ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BD-6 0.3 - 2 09/25/01 BD6-S(0-2)	BD-6 0.3 - 2 09/25/01 BD6-S(0-2)DL	BD-6 8 - 10 09/25/01 BD6-S(8-10)	BD-6 8 - 10 09/25/01 BD6-S(8-10)DL	BD-6 76 - 78 09/26/01 BP6-S(76-78)	BD-6 76 - 78 09/26/01 BP6-S(76-78)DL	BD-6 76 - 78 09/26/01 BP6-S(76-78)-N	BD-6 98 - 100 09/26/01 BP6-S(98-100)	BD-6 98 - 100 09/26/01 BP6-S(98-100)DL	BD-6 98 - 100 09/26/01 BP6-S(98-100)-N	BD-6 134 - 136 09/27/01 BD6-S(134-136)-N	BW1-01 0 - 2 07/16/01 BW1-01-S(0-2)-N	BW1-01 8 - 10 07/16/01 BW1-01-S(8-10)-N	BW1-02 0 - 2 07/16/01 BW1-02-S(0-2)-N	BW1-02 8 - 10 07/16/01 BW1-02-S(8-10)-N	BW1-03 0 - 2 07/16/01 BW1-03-S(0-2)-N
Detected Volatile Organics																						
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	NA	0.02 U	NA	0.025 U	NA	0.011 J	NA	NA	0.0038 J	NA	0.0044 J	0.002 U	0.35 J	0.14	0.24 J	0.0023 U
Benzene	840	0.1	0.1	4	**8.4**	400	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00056 U	0.00061 U	0.39	0.003 J	0.054 J	0.00071 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	NA	0.02 U	NA	0.025 U	NA	0.025 U	NA	NA	0.019 U	NA	0.0023 U	0.0025 U	0.19 J	0.022	0.16 J	0.0029 U
Carbon Disulfide	43,000	16	46	- -	**140**	280	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00067 U	0.00074 U	0.043 U	0.0022 J	0.031 U	0.00085 U
CFC-11	260,000	52	150	- -	**5,100**	560	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.00094 U	0.001 U	0.023 U	0.001 U	0.017 U	0.0012 U
CFC-12	170,000	95	270	- -	**1,700**	1,000	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.00094 U	0.001 U	0.047 U	0.001 U	0.034 U	0.0012 U
Chlorobenzene	14,000	2	2	0.5	**220**	260	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00045 U	0.00049 U	0.11 J	0.00048 U	0.0072 U	0.00057 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.0019 U	0.0021 U	0.046 U	0.002 U	0.033 U	0.0024 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.00086 U	0.00094 U	0.26 J	0.014	0.039 J	0.0011 U
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00061 U	0.00067 U	0.02 U	0.0034 J	0.014 U	0.00077 U
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00069 U	0.00076 U	0.11 J	0.00074 U	0.0085 U	0.00087 U
1,1-Dichloroethane	87,000	18	50	15	**430**	890	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.0005 U	0.00055 U	0.017 U	0.00054 U	0.012 U	0.00063 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00072 U	0.00079 U	0.15 J	0.00078 U	0.014 U	0.00092 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00063 U	0.00069 U	0.022 U	0.00068 U	0.016 U	0.0008 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0032 J	NA	0.0011 U	0.0012 U	0.051 U	0.0012 U	0.036 U	0.0014 U
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00051 U	0.00056 U	2.5	0.013	0.17 J	0.00064 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.0006 U	0.00066 U	0.4	0.00065 U	0.1 J	0.00076 U
Methyl acetate	- -	- -	- -	- -	**- -**	- -	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.00094 U	0.001 U	0.59 J	0.001 U	0.04 U	0.0012 U
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	NA	0.02 U	NA	0.025 U	NA	0.025 U	NA	NA	0.019 U	NA	0.0015 U	0.0016 U	0.037 U	0.0016 U	0.027 U	0.0019 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.00051 U	0.00056 U	0.82	0.026	0.24 J	0.00064 U
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	NA	0.02 U	NA	0.025 U	NA	0.025 U	NA	NA	0.019 U	NA	0.0016 U	0.0018 U	0.68 J	0.0059 J	0.094 J	0.0021 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.001 U	0.0011 U	0.019 U	0.0011 U	0.013 U	0.0013 U
Toluene	160,000	16	16	5.4	**610**	250	NA	0.0014 J	NA	0.0018 J	NA	0.0063 U	NA	NA	0.0016 J	NA	0.00087 J	0.0005 U	1.6	0.01	0.32	0.00058 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00079 U	0.00087 U	0.012 U	0.00085 U	0.0088 U	0.001 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.00065 U	0.00072 U	0.055 J	0.0007 U	0.015 U	0.00083 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	NA	0.005 U	NA	0.0062 U	NA	0.0063 U	NA	NA	0.0047 U	NA	0.0008 U	0.00088 U	0.046 U	0.00086 U	0.033 U	0.0089
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.0012 U	0.0013 U	0.014 U	0.0013 U	0.0098 U	0.0015 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	NA	0.01 U	NA	0.012 U	NA	0.013 U	NA	NA	0.0094 U	NA	0.0016 U	0.0018 U	13	0.036	1	0.0021 U
Detected TPH																						
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	94.8 J	NA	2,310 J	NA	NA	NA	129 J	NA	NA	25.9 J	367 U	NA	NA	NA	NA	NA
Detected Semivolatile Organics																						
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.16 U	0.15 U	3.8 U	3.6 U	1.7 U	0.58 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.089 U	0.086 U	2.1 U	2.1 U	0.95 U	0.33 U
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.053 U	0.051 U	33	1.2 U	2.1 J	1.7
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.051 U	0.049 U	1.2 U	1.2 U	0.55 U	0.19 U
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.052 U	0.05 U	4.3 J	1.2 U	0.56 U	0.19 U
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.057 U	0.055 U	1.6 J	1.3 U	0.61 U	0.4 J
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.052 U	0.05 U	1.3 U	1.2 U	0.56 U	0.19 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.055 U	0.053 U	2.1 J	1.3 U	0.58 U	0.2 U
Atrazine	330	0.06	0.06	0.15	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.17 U	0.16 U	4 U	3.9 U	1.8 U	0.62 U
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	0.36 U	NA	0.58	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.061 U	0.059 U	6.2 J	1.4 U	0.65 U	0.23 U
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	0.36 U	NA	0.49	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.067 U	0.064 U	1.6 U	1.6 U	0.71 U	0.25 U
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	0.36 U	NA	0.77	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.065 U	0.062 U	1.6 U	1.5 U	0.69 U	0.36 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	0.36 U	NA	0.29 J	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.061 U	0.059 U	2.8 J	1.4 U	0.65 U	0.22
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	0.36 U	NA	0.4	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.059 U	0.057 U	1.4 U	1.4 U	0.63 U	0.22 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	0.066 J	NA	1.4	NA	1.2	NA	NA	0.95	NA	NA	0.06 U	0.058 U	2.8 J	1.4 U	0.64 U	0.22 U
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.057 U	0.055 U	36	1.3 U	0.61 U	0.21 U
Carbazole	2,400	9.4	39	1.1	**- -**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.058 U	0.056 U	1.4 U	1.4 U	0.62 U	0.21 U
Chrysene	8,000	- -	- -	- -	**- -**	- -	0.36 U	NA	0.68	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.051 U	0.049 U	10	2.5 J	0.55 U	0.38 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	0.36 U	NA	0.089 J	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.057 U	0.055 U	1.4 U	1.3 U	0.61 U	0.21 U
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.056 U	0.054 U	2.9 J	1.3 U	0.59 U	0.37 J
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.17 U	0.16 U	4 U	16	1.8 U	0.62 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.06 U	0.058 U	1.4 U	1.4 U	0.64 U	0.22 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	0.36 U	NA	1	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.062 U	0.06 U	24	3.4 J	0.66 U	0.41 J
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.053 U	0.051 U	5.5 J	1.2 U	0.57 U	0.2 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	0.36 U	NA	0.29 J	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.078 U	0.075 U	2.2 J	1.8 U	0.83 U	0.29 U
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	0.36 U	NA	0.24 J	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.058 U	0.056 U	33	2.5 J	0.94 J	0.64 J
Phenol	230,000	88	260	9	**- -**	12,000	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.055 U	0.053 U	1.3 U	1.3 U	0.58 U	0.31 J
Pyrene	84,000	480	480	- -	**1,000,000**	- -	0.36 U	NA	0.8	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.057 U	0.055 U	16	2.9 J	0.61 U	1.1 J
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	52,000	35	100	0.73	**470**	- -	0.36 U	NA	0.37 U	NA	0.39 U	NA	NA	0.37 U	NA	NA	0.055 U	0.053 U	8.4 J	1.3 U	0.64 J	3.1

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-03 4 - 6 07/16/01 BW1-03-S(4-6)-N	BW1-04 0 - 2 07/16/01 BW1-04-S(0-2)-N	BW1-04 8 - 10 07/16/01 BW1-04-S(8-10)-N	BW1-04 12 - 14 07/16/01 BW1-04-S(12-14)-N	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)	BW1-06 1 - 2 01/11/02 BW1-06-S(0-2)DL	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)DL	BW1-06 2 - 4 01/11/02 BW1-06-S(2-4)R2	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)	BW1-06 4 - 6 01/11/02 BW1-06-S(4-6)DL	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)	BW1-10 1.3 - 2 01/11/02 BW1-10-S(0-2)DL	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)	BW1-10 2 - 4 01/11/02 BW1-10-S(2-4)DL	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)
Detected Volatile Organics																						
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.38 J	0.3 J	0.018 J	0.032 J	NA	0.022 UJ	0.021 UJ	NA	NA	0.02 U	NA	0.0071 J	NA	0.011 J	NA
Benzene	840	0.1	0.1	4	**8.4**	400	0.076 J	0.39	0.00068 U	0.00069 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.17 J	0.1 U	0.0028 U	0.0041 J	NA	0.022 UJ	0.021 UJ	NA	NA	0.02 U	NA	0.024 UJ	NA	0.021 U	NA
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.033 U	0.044 U	0.00082 U	0.00083 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
CFC-11	260,000	52	150	- -	**5,100**	560	0.018 U	0.024 U	0.0012 U	0.0012 U	NA	0.011 UJ	0.01 UJ	NA	NA	0.01 U	NA	0.012 UJ	NA	0.01 UJ	NA
CFC-12	170,000	95	270	- -	**1,700**	1,000	0.036 U	0.048 U	0.0012 U	0.0012 U	NA	0.0014 J	0.01 U	NA	NA	0.01 U	NA	0.012 U	NA	0.01 U	NA
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.0076 U	0.01 U	0.00055 U	0.00055 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.035 U	0.047 U	0.0039 J	0.0052 J	NA	0.011 U	0.01 U	NA	NA	0.01 U	NA	0.012 U	NA	0.01 U	NA
Cyclohexane	- -	- -	- -	- -	**- -**	- -	0.16 J	0.22 J	0.001 U	0.0011 U	NA	0.011 UJ	0.01 UJ	NA	NA	0.01 U	NA	0.012 UJ	NA	0.01 UJ	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	0.015 U	0.02 U	0.00074 U	0.00076 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	0.0089 U	0.012 U	0.00084 U	0.00085 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.013 U	0.018 U	0.035	0.021	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.19 J	0.02 U	0.00088 U	0.0009 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.017 U	0.023 U	0.00077 U	0.00078 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.13 J	0.13 J	0.0014 U	0.0014 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.28	0.13 J	0.00062 U	0.00063 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0021 J	NA	0.0027 J	NA
Isopropylbenzene	80,000	91	260	3.2	**730**	390	0.16 J	0.039 J	0.00073 U	0.00075 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Methyl acetate	- -	- -	- -	- -	**- -**	- -	0.14 J	0.35 J	0.0012 U	0.0012 UJ	NA	0.011 U	0.01 U	NA	NA	0.01 U	NA	0.012 U	NA	0.01 U	NA
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.028 U	0.038 U	0.0018 U	0.0018 U	NA	0.022 UJ	0.021 UJ	NA	NA	0.02 U	NA	0.024 UJ	NA	0.021 UJ	NA
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	0.44 J	0.59 J	0.00062 U	0.00063 U	NA	0.011 U	0.01 U	NA	NA	0.01 U	NA	0.00088 J	NA	0.00085 J	NA
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.11 J	0.037 U	0.002 U	0.002 U	NA	0.022 U	0.021 U	NA	NA	0.02 U	NA	0.024 U	NA	0.021 U	NA
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.014 U	0.019 U	0.0013 U	0.0013 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Toluene	160,000	16	16	5.4	**610**	250	0.29	0.61	0.00056 U	0.00057 U	NA	0.0014 J	0.0013 J	NA	NA	0.0012 J	NA	0.0016 J	NA	0.0018 J	NA
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0093 U	0.012 U	0.0039 J	0.0026 J	NA	0.0056 UJ	0.0052 UJ	NA	NA	0.0051 U	NA	0.0061 UJ	NA	0.0052 UJ	NA
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.17 J	0.021 U	0.0008 U	0.00081 U	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	0.035 U	0.047 U	0.0055	0.0086	NA	0.0056 U	0.0052 U	NA	NA	0.0051 U	NA	0.0061 U	NA	0.0052 U	NA
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.01 U	0.014 U	0.0015 U	0.0015 U	NA	0.011 U	0.01 U	NA	NA	0.01 U	NA	0.012 U	NA	0.01 U	NA
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	1.5	0.92	0.002 U	0.002 U	NA	0.011 U	0.01 U	NA	NA	0.01 U	NA	0.012 U	NA	0.01 U	NA
Detected TPH																					
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																					
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	3.4 J	0.64 U	0.16 U	0.16 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	1.8 U	0.38 J	0.09 U	0.092 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	7 J	9	0.062 J	0.055 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	1 U	1.3 J	0.052 U	0.053 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	1.1 U	0.54 J	0.053 U	0.054 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	1.2 U	0.23 U	0.058 U	0.058 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	1.1 U	0.22 U	0.053 U	0.054 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	1.2 J	0.62 J	0.055 U	0.056 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Atrazine	330	0.06	0.06	0.15	**- -**	- -	3.4 U	0.69 U	0.17 U	0.17 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	1.3 J	0.47 J	0.062 U	0.12 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	1.4 U	0.3 J	0.068 U	0.13 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	2.1 J	0.44 J	0.082 J	0.15 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	1.3 U	0.26 J	0.062 U	0.083 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	1.2 U	0.24 U	0.06 U	0.1 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	1.2 U	0.25 U	0.061 U	0.062 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	1.2 U	0.23 U	0.058 U	0.058 U	3.4	NA	NA	0.72	0.67	NA	0.57	NA	0.21 J	NA	0.14 J
Carbazole	2,400	9.4	39	1.1	**- -**	- -	1.2 U	0.24 J	0.059 U	0.06 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Chrysene	8,000	- -	- -	- -	**- -**	- -	4.5 J	0.68 J	0.076 J	0.16 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	1.2 U	0.23 U	0.058 U	0.058 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	1.1 U	0.87 J	0.056 U	0.057 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	5.7 J	0.69 U	0.17 U	0.17 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	1.2 U	0.25 U	0.061 U	0.062 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	3.1 J	0.73 J	0.063 U	0.095 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	2.3 J	0.34 J	0.054 U	0.055 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	1.6 U	0.32 U	0.079 U	0.08 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	8.8	2.7	0.092 J	0.077 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Phenol	230,000	88	260	9	**- -**	12,000	1.1 U	2.2	0.055 U	0.056 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
Pyrene	84,000	480	480	- -	**1,000,000**	- -	5.7 J	1 J	0.058 U	0.11 J	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	52,000	35	100	0.73	**470**	- -	2.9 J	4.9	0.055 U	0.056 U	0.35 U	NA	NA	0.35 U	0.35 U	NA	0.35 U	NA	0.35 U	NA	0.35 U

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW1-10 4 - 6 01/11/02 BW1-10-S(4-6)DL	BW1-10 8 - 10 01/11/02 BW1-10-S(8-10)DL	BW1-10 12 - 14 01/11/02 BW1-10-S(12-14)DL	BW1-11A 0 - 2 07/30/03 BW111S(0-2)DL	BW1-11A 6 - 8 07/30/03 BW111S(6-8)DL	MW-26-99 10 - 11 09/10/99 091099-KMV-06	MW-27-99 10 - 11 09/10/99 091099-KMV-07	MW-34-99 22 - 23 09/01/99 090199-KMV-04	MW-36-99 17 - 18 09/02/99 090299-KMV-05	MW-39-99 4 - 6 09/01/99 090199-KMV-02	MW-39-99 26 - 27 09/01/99 090199-KMV-03	MW-40-99 15 - 16 08/31/99 083199-KMV-01	MWW1-01 4 - 6 08/06/01 BMWW1-01-S(4-6)-N	MWW1-01 8 - 10 08/06/01 BMWW1-01-S(8-10)-N
Detected Volatile Organics																					
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	0.1 U	0.1 U	0.62	4.9	0.1 U	0.1 U	0.1 U	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.023 J	1.9 U	4.6 U	1 U	0.88 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.075 U	0.073 U
Benzene	840	0.1	0.1	4	**8.4**	400	0.002 J	0.039 J	1.1 U	0.25	0.062 J	0.05 U	0.05 U	0.05 U	0.058	0.05 U	0.05 U	0.057	0.017 U	0.017 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.0047 J	0.18 J	0.38 J	1 U	0.88 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.081 U	0.079 U
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.035 U	0.034 U
CFC-11	260,000	52	150	- -	**5,100**	560	0.009 UJ	0.96 U	2.3 U	0.5 U	0.44 U	NA	NA	NA	NA	NA	NA	NA	0.019 U	0.019 U
CFC-12	170,000	95	270	- -	**1,700**	1,000	0.009 U	0.96 UJ	2.3 U	0.5 U	0.44 U	NA	NA	NA	NA	NA	NA	NA	0.038 U	0.037 U
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0081 U	0.0079 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.0022 J	0.96 U	2.3 U	0.5 U	0.44 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.037 U	0.036 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	0.0022 J	0.18 J	0.3 J	0.13 J	0.23 J	NA	NA	NA	NA	NA	NA	NA	0.0085 U	0.0083 U
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	0.0045 U	0.48 U	1.1 U	0.25 U	0.45	NA	NA	NA	NA	NA	NA	NA	0.016 U	0.016 U
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	0.0095 U	0.0093 U
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.0045 U	0.48 U	0.17 J	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.014 U	0.014 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.016 U	0.016 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.018 U	0.018 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.0045 U	0.48 U	1.1 J	0.25 U	0.22 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.041 U	0.04 U
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.044	3.5	8.9	0.11 J	0.64	0.05 U	0.05 U	0.15	1.7	0.05 U	0.05 U	0.05 U	0.17 J	0.014 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	0.0025 J	0.38 J	1.1	0.25 U	0.35	NA	NA	NA	NA	NA	NA	NA	0.13 J	0.0077 U
Methyl acetate	- -	- -	- -	- -	**- -**	- -	0.009 U	0.7 J	34	0.21 J	0.44 U	NA	NA	NA	NA	NA	NA	NA	0.045 U	0.044 U
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.018 UJ	1.9 U	4.6 U	1 U	0.88 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.03 U	0.029 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	0.0042 J	0.85 J	1.4 J	0.29 J	1	NA	NA	NA	NA	NA	NA	NA	0.062 J	0.016 U
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.018 U	1.9 U	4.6 U	1 U	0.88 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.029 U	0.028 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.12	0.05 U	0.05 U	0.05 U	0.015 U	0.015 U
Toluene	160,000	16	16	5.4	**610**	250	0.0018 J	0.12 J	2.4 J	0.25 U	0.57 B	0.05 U	0.05 U	0.05 U	2.1	0.05 U	0.05 U	0.068	0.049 J	0.0098 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0045 UJ	0.48 U	1.1 U	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0099 U	0.0097 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.0045 U	0.049 J	0.25 J	0.25 U	0.22 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.017 U	0.017 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	0.0045 U	0.48 U	1.1 U	0.25 U	0.22 U	NA	NA	NA	NA	NA	NA	NA	0.037 U	0.036 U
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.009 U	0.96 U	2.3 U	0.5 U	0.44 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.011 U	0.011 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	0.05 U	0.05 U	0.05 U	2.7	0.05 U	0.05 U	0.05 U	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	0.026	7.4 J	39 J	0.49 J	3	U	U	0.62	7.6	U	U	U	0.93	0.093 J
Detected TPH																				
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																				
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	NA	35 U	18 U	0.3 J	3.4 J	NA	NA	NA	NA	NA	NA	NA	8.1 U	4.1 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	4.6 U	2.4 U
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	NA	85	150	2.7	29 J	NA	NA	NA	NA	NA	NA	NA	5.3 J	1.4 U
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	35 U	18 U	0.34 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.7 U	1.4 U
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	35 U	18 U	0.15 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.7 U	1.4 U
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	NA	35 U	5.3 J	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3 U	1.5 U
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	2.7 U	1.4 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	NA	35 U	3.1 J	0.17 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.8 U	1.4 U
Atrazine	330	0.06	0.06	0.15	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	8.7 U	4.4 U
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	NA	35 U	18 U	0.14 J	38 U	NA	NA	NA	NA	NA	NA	NA	3.2 U	1.6 U
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3.5 U	1.8 U
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	NA	35 U	18 U	0.14 J	38 U	NA	NA	NA	NA	NA	NA	NA	3.4 U	1.7 U
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3.2 U	1.6 U
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3.1 U	1.6 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	NA	6.2 J	76	0.14 J	38 U	NA	NA	NA	NA	NA	NA	NA	3.1 U	1.6 U
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	NA	170	57	0.094 J	38 U	NA	NA	NA	NA	NA	NA	NA	3 U	1.5 U
Carbazole	2,400	9.4	39	1.1	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3 U	1.5 U
Chrysene	8,000	- -	- -	- -	**- -**	- -	NA	35 U	2.7 J	0.18 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.7 U	1.4 U
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3 U	1.5 U
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	NA	35 U	18 U	0.23 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.9 U	1.5 U
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	NA	35 U	18 U	1.8 U	11 J	NA	NA	NA	NA	NA	NA	NA	8.7 U	4.4 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	3.1 U	1.6 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	NA	35 U	6.1 J	0.28 J	38 U	NA	NA	NA	NA	NA	NA	NA	4.2 J	1.6 U
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	NA	35 U	8.9 J	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	8.3 J	1.9 J
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	NA	35 U	18 U	1.8 U	38 U	NA	NA	NA	NA	NA	NA	NA	4.1 U	2.1 U
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	NA	13 J	23	0.8 J	10 J	NA	NA	NA	NA	NA	NA	NA	18 J	4.1 J
Phenol	230,000	88	260	9	**- -**	12,000	NA	35 U	18 U	0.86 J	38 U	NA	NA	NA	NA	NA	NA	NA	2.8 U	1.4 U
Pyrene	84,000	480	480	- -	**1,000,000**	- -	NA	6.9 J	9.2 J	0.31 J	38 U	NA	NA	NA	NA	NA	NA	NA	4.4 J	1.5 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	52,000	35	100	0.73	**470**	- -	NA	12 J	18	1.5 J	4.6 J	NA	NA	NA	NA	NA	NA	NA	2.8 U	1.4 U

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW1-01 10 - 12 08/06/01 BMWW1-01-S(10-12)-N	MWW1-04 2 - 4 12/18/01 BMWW1-02S(24)12180DL	MWW1-04 4 - 6 12/18/01 BMWW1-02S(46)12180DL	MWW1-06 0 - 2 07/30/02 MWW1-06-S(0-2)	MWW1-06 0 - 2 07/30/02 MWW1-06-S(0-2)DL	MWW1-06 2 - 4 07/30/02 MWW1-06-S(4)	MWW1-06 2 - 4 07/30/02 MWW1-06-S(4)DL	SBDW16 16 - 18 12/15/95 SBDW16-05.0	SBDW16 16 - 18 12/15/95 SBDW16-16.0	SBDW18 34 - 36 12/20/95 SBDW18-34.0	SBDW19 36 - 38 12/15/95 SBDW19-36.0	SBDW20 40 - 42 12/19/95 SBDW20-40.0	SBDW21 18 - 20 12/19/95 SBDW21-18.0	SBDW22 32 - 34 12/19/95 SBDW22-32.0
Detected Volatile Organics																				
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.074 U	0.0027 J	0.011 J	NA	0.021 UJ	NA	0.021 U	0.0025 J	NA	0.059 U [0.056 U]	0.088	0.012 J [0.011 J]	0.29 U	0.011 J
Benzene	840	0.1	0.1	4	**8.4**	400	0.017 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.08 U	0.023 U	0.021 U	NA	0.021 U	NA	0.021 U	0.055 U	NA	0.059 U [0.056 U]	0.018 J	0.0025 J [0.0028 J]	0.29 U	0.057 U
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.035 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.055 U	NA	0.059 U [0.056 U]	0.0096 J	0.059 U [0.06 U]	0.29 U	0.057 U
CFC-11	260,000	52	150	- -	**5,100**	560	0.019 U	0.0014 J	0.0015 J	NA	0.01 U	NA	0.01 U	NA	NA	NA	NA	0.0059 U [0.006 U]	NA	0.0057 U
CFC-12	170,000	95	270	- -	**1,700**	1,000	0.038 U	0.012 UJ	0.01 UJ	NA	0.01 U	NA	0.01 U	NA	NA	NA	NA	0.0059 U [0.006 U]	NA	0.0057 U
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.008 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.037 U	0.012 U	0.01 U	NA	0.01 U	NA	0.01 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	0.0084 U	0.012 U	0.01 U	NA	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	0.016 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	0.0094 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.014 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.016 [0.021]	0.029 U	0.0057 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.016 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0086 [0.016]	0.029 U	0.0057 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.018 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.04 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.053 J	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	0.038 J	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	NA	NA	NA	NA	NA	NA	NA
Methyl acetate	- -	- -	- -	- -	**- -**	- -	0.2 J	0.012 U	0.01 U	NA	0.01 U	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.03 U	0.023 U	0.021 U	NA	0.021 UJ	NA	0.021 UJ	0.055 U	NA	0.059 U [0.056 U]	0.076 U	0.059 U [0.06 U]	0.29 U	0.057 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	0.016 U	0.012 U	0.01 U	NA	0.00064 J	NA	0.01 U	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.029 U	0.023 U	0.021 U	NA	0.021 U	NA	0.021 U	0.055 U	NA	0.059 U [0.056 U]	0.076 U	0.059 U [0.06 U]	0.29 U	0.057 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.015 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Toluene	160,000	16	16	5.4	**610**	250	0.0099 U	0.00071 J	0.001 J	NA	0.00085 J	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0037 J	0.0059 U [0.006 U]	0.029 U	0.0057 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0098 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.017 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	0.037 U	0.0058 U	0.0051 U	NA	0.0051 U	NA	0.0051 U	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.011 U	0.012 U	0.01 U	NA	0.01 U	NA	0.01 U	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.004 J [0.015]	0.029 U	0.0057 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	0.29 J	0.012 U	0.01 U	NA	0.01 U	NA	0.01 U	0.016 U	NA	0.018 U [0.017 U]	0.023 U	0.018 U [0.018 U]	0.088 U	0.017 U
Detected TPH																				
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																				
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	4.1 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	2.4 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.041 J [0.03 J]	1.9 U	0.054 J
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	2.1 J	1.6 U	0.19 J	0.071 J	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.11 J [0.2 U]	2.4	0.13 J
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	1.4 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.025 J [0.027 J]	1.9 U	0.19 U
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19 U [0.2 U]	NA	0.11 J
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	1.4 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.11 J
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	1.5 U	0.6 J	0.73 J	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	1.4 U	1.6 U	0.99 U	0.058 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	1.4 U	1.1 J	1.4	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	0.31 J	0.054 J
Atrazine	330	0.06	0.06	0.15	**- -**	- -	4.4 U	1.6 U	0.99 U	0.096 J	NA	0.39 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	1.6 U	4.9	4.2	0.19 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.042 J
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	1.8 U	4	3.3	0.32 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	1.7 U	5.6	4.2	0.57	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.028 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	1.6 U	2.3	1.7	0.33 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	1.6 U	2.1	1.4	0.21 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	1.6 U	5.9	5.8	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	1.5 U	0.75 J	0.67 J	0.096 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.38 [0.2 U]	1.9 U	0.39
Carbazole	2,400	9.4	39	1.1	**- -**	- -	1.5 U	0.63 J	0.74 J	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.043 J
Chrysene	8,000	- -	- -	- -	**- -**	- -	1.4 U	5	4.6	0.26 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.047 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	1.5 U	0.67 J	0.43 J	0.075 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	1.5 U	0.31 J	0.43 J	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	4.4 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	1.6 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	1.6 U	9.2	9.9	0.27 J	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.038 J [0.2 U]	0.35 J	0.19
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	2.8 J	0.47 J	0.6 J	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.18 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.2 J	0.054 J
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	2.1 U	2.2	1.5	0.3 J	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19 U [0.2 U]	NA	0.19 U
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	6.2 J	5	5.5	0.088 J	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.045 J [0.2 U]	3.1	0.23
Phenol	230,000	88	260	9	**- -**	12,000	1.4 U	1.6 U	0.99 U	0.35 U	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.19 U
Pyrene	84,000	480	480	- -	**1,000,000**	- -	1.6 J	8.4	8.3	0.33 J	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.024 J [0.2 U]	0.35 J	0.11 J
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	NA	NA	NA	NA	NA	NA	NA	0.0055 U	NA	0.0059 U [0.0056 U]	0.0076 U	0.0059 U [0.006 U]	0.029 U	0.0057 U
Naphthalene	52,000	35	100	0.73	**470**	- -	1.4 U	0.28 J	0.56 J	0.048 J	NA	0.39 U	NA	NA	0.18 U	0.19 U [0.18 U]	0.25 U	0.19 U [0.2 U]	1.9 U	0.069 J

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth(ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBMW16 5 - 7 12/20/95 SBMW16-5.0	SBMW17 6 - 8 12/20/95 SBMW17-06.0	SBMW17 10 - 12 12/14/95 SBMW17-10.0	SBMW18 16 - 18 12/14/95 SBMW18-16.0	SBMW18 34 - 36 12/20/95 SBMW18-34.0	SBMW19 25 - 27 12/18/95 SBMW19-25.0	SBMW19 25 - 27 12/18/95 SBMW19-27.0	SBMW20 23 - 25 12/20/95 SBMW20-23.0	SBMW22 16 - 18 12/12/95 SBMW22-16.0	SBSB1 16 - 18 12/12/95 SBSB1-16.0	SBSB2 4 - 6 12/14/95 SBSB2-04.0	SBSB3 16 - 18 12/14/95 SBSB3-16.0	SBSB4 6 - 8 12/15/95 SBSB4-06.0	SBSB5 4 - 6 12/12/95 SBSB5-04.0	SBTT1 10 - 15 01/22/96 SBTT1-10.0	SBTT2 15 - 01/22/96 SBTT2-15.0	SBTT3 5 - 9 01/23/96 SBTT3-5.0	SBTT4 3 - 10 01/23/96 SBTT4-3.0	SBTT5 3 - 5 01/23/96 SBTT5-3.0
Detected Volatile Organics																										
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.058 U	0.06 U	0.09 U	0.02 J	NA	0.022 J	NA	7 U [0.31 J]	0.21 J	0.059 U	0.058 U	0.016 J	0.055 U	2.2 J	0.0042 J	0.042 J	57 U	0.032 J	0.0027 J
Benzene	840	0.1	0.1	4	**8.4**	400	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	0.72 J	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.058 U	0.06 U	0.09 U	0.059 U	NA	0.0034 J	NA	7 U [1.1 J]	0.058 J	0.059 U	0.058 U	0.0029 J	0.055 U	1.6 J	0.053 U	0.017 J	57 U	0.0066 J	0.055 U
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.058 U	0.0026 J	0.09 U	0.059 U	NA	0.06 U	NA	7 U [7.3 U]	0.66 U	0.059 U	0.058 U	0.054 U	0.055 U	14 U	0.053 U	0.27 U	57 U	0.052 U	0.055 U
CFC-11	260,000	52	150	- -	**5,100**	560	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA	1.4 U	NA	NA	NA	NA	NA
CFC-12	170,000	95	270	- -	**1,700**	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0059 U	NA	NA	NA	1.4 U	NA	NA	NA	NA	NA
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.0032 J	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	25	0.0052 U	0.0055 U
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	6.1 [5.4]	0.3	0.0059 U	0.0058 U	0.0054 U	0.0055 U	25	0.0053 U	0.022 J	15	0.0052 U	0.0055 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl acetate	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.058 U	0.06 U	0.09 U	0.059 U	NA	0.06 U	NA	7 U [7.3 U]	0.66 U	0.059 U	0.058 U	0.054 U	0.055 U	14 U	0.053 U	0.27 U	57 U	0.052 U	0.055 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.058 U	0.06 U	0.09 U	0.059 U	NA	0.06 U	NA	7 U [7.3 U]	0.66 U	0.059 U	0.058 U	0.054 U	0.055 U	14 U	0.053 U	0.27 U	57 U	0.0039 J	0.055 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.0024 J	0.0025 J	0.009 U	0.0059 U	NA	0.0029 J	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
Toluene	160,000	16	16	5.4	**610**	250	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.0061 U	NA	1.5 [2.5]	0.25	0.0059 U	0.0058 U	0.0024 J	0.0055 U	34	0.0053 U	0.036	42	0.0051 J	0.0055 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	0.006 U	NA	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0052 U	0.0055 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	0.011 U	0.018 U	0.027 U	0.018 U	NA	0.018 U	NA	20 [17]	2.4	0.018 U	0.017 U	0.0068 J	0.016 U	150	0.016 U	0.16	75	0.0073 J	0.016 U
Detected TPH																									
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																									
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.024 J	14 U	72 J	21 U	0.15 J
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	0.19 U	0.23	0.3 U	0.061 J	NA	NA	0.2 U	85 [120]	19 J	0.19 U	0.19 U	1.8 U	0.027 J	55	0.35	7.2 J	34 J	21 U	2.7
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	0.19 U	0.038 J	0.3 U	0.2 U	NA	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.041 J	14 U	110 U	21 U	0.32
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19 U	NA	NA	NA	30 U	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	0.19 U	0.083 J	0.3 U	0.2 U	NA	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.045 J	14 U	70 J	21 U	0.18
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	0.19 U	0.033 J	0.3 U	0.038 J	0.19 U	NA	0.2 U	5.3 J [6.5]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.024 J	14 U	14 J	21 U	0.057 J
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.18 U	14 U	110 U	21 U	0.18 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	0.19 U	0.2 U	0.3 U	0.023 J	0.19 U	NA	0.2 U	37 U [3.9 U]	4.9 J	0.19 U	0.19 U	1.8 U	0.02 J	30 U	0.047 J	14 U	11 J	21 U	0.3
Atrazine	330	0.06	0.06	0.15	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.042 J	0.19 U	NA	0.2 U	5.6 J [6.3]	7.7 J	0.19 U	0.19 U	1.8 U	0.054 J	30 U	0.48	14 U	110 U	21 U	0.19
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.025 J	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.041 J	30 U	0.69	14 U	110 U	21 U	0.14 J
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.043 J	0.19 U	NA	0.2 U	4.2 J [8.3]	35 U	0.19 U	0.19 U	1.8 U	0.071 J	30 U	1.2	14 U	110 U	21 U	0.24
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.021 J	0.19 U	NA	0.2 U	37 U [3.9 U]	4.2 J	0.19 U	0.19 U	1.8 U	0.028 J	30 U	0.58	14 U	110 U	21 U	0.082 J
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.036 J	30 U	0.46	14 U	110 U	21 U	0.077 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	24 J [35]	35 U	0.024 J	0.19 U	1.8 U	0.18 U	30 U	0.18 U	14 U	3.2 J	21 U	0.083 J
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	8.2 J [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.18 U	14 U	1,100	3 J	0.13 J
Carbazole	2,400	9.4	39	1.1	**- -**	- -	0.19 U	0.2 U	0.3 U	0.2 U	NA	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.021 J	14 U	110 U	21 U	0.11 U
Chrysene	8,000	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.055 J	0.19 U	NA	0.2 U	8 J [9.7]	12 J	0.19 U	0.19 U	1.8 U	0.067 J	30 U	0.73	14 U	110 U	21 U	0.23
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.25	14 U	110 U	21 U	0.023 J
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	0.19 U	0.026 J	0.3 U	0.022 J	0.19 U	NA	0.2 U	37 U [4.2]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.048 J	14 U	13 J	21 U	0.17 J
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	480	0.18 U	14 U	110 U	21 U	0.18 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	0.19 U	0.2 U	0.3 U	0.2 U	0.19 U	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.18 U	14 U	37 J	21 U	0.18 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	0.19 U	0.046 J	0.3 U	0.099 J	0.19 U	NA	0.2 U	15 J [21]	19 J	0.19 U	0.19 U	1.8 U	0.13 J	30 U	0.32	14 U	22 J	21 U	0.34
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	0.19 U	0.046 J	0.3 U	0.2 U	0.19 U	NA	0.2 U	7.5 J [9.2]	5.4 J	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.04 J	14 U	26 J	21 U	0.091 J
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	0.19 U	0.2 U	0.3 U	0.2 U	NA	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.027 J	30 U	0.51	14 U	110 U	21 U	0.053 J
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.19 U	NA	NA	NA	30 U	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	0.19 U	0.12 J	0.3 U	0.15 J	NA	NA	0.2 U	21 J [26]	25 J	0.19 U	0.19 U	1.2 J	0.12 J	11 J	0.3	4.9 J	52 J	3.1 J	0.6
Phenol	230,000	88	260	9	**- -**	12,000	0.19 U	0.2 U	0.3 U	0.2 U	NA	NA	0.2 U	37 U [3.9 U]	35 U	0.19 U	0.19 U	1.8 U	0.18 U	30 U	0.11 J	14 U	140	21 U	0.9
Pyrene	84,000	480	480	- -	**1,000,000**	- -	0.19 U	0.032 J	0.3 U	0.053 J	NA	NA	0.2 U	13 J [13]	13 J	0.19 U	0.19 U	1.8 U	0.072 J	30 U	0.31	14 U	17 J	21 U	0.3
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	0.0058 U	0.006 U	0.009 U	0.0059 U	NA	NA	0.006 U	0.7 U [0.73 U]	0.066 U	0.0059 U	0.0058 U	0.0054 U	0.0055 U	1.4 U	0.0053 U	0.027 U	5.7 U	0.0027 U	0.0055 U
Naphthalene	52,000	35	100	0.73	**470**	- -	0.19 U	0.21	0.3 U	0.13 J	NA	NA	0.2 U	12 J [19]	7.1 J	0.19 U	0.19 U	1.8 U	0.022 J	19 J	0.19	3.7 J	70 J	21 U	1.4

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBWD1 4 - 6 12/18/95 SBWD1-04.0	SBWD1 10 - 12 12/18/95 SBWD1-10.0	SBWD1 14 - 16 12/18/95 SBWD1-14.0	SBWD1 20 - 22 12/18/95 SBWD1-20.0	SBWD1 24 - 26 12/18/95 SBWD1-24.0	SBWD1 30 - 32 12/18/95 SBWD1-30.0	SBWD1 34 - 36 12/18/95 SBWD1-34.0	SBWD2 4 - 6 12/18/95 SBWD2-04.0	SBWD2 10 - 12 12/18/95 SBWD2-10.0	SBWD2 14 - 16 12/18/95 SBWD2-14.0	SBWD2 20 - 22 12/18/95 SBWD2-20.0	SBWD2 24 - 26 12/18/95 SBWD2-24.0	SBWD2 30 - 32 12/19/95 SBWD2-30.0	SBWD2 34 - 36 12/19/95 SBWD2-34.0	SBWD3 4 - 6 12/19/95 SBWD3-04.0	SBWD3 10 - 12 12/19/95 SBWD3-10.0	SBWD3 14 - 16 12/19/95 SBWD3-14.0	SBWD3 20 - 22 12/19/95 SBWD3-20.0	SBWD3 24 - 26 12/18/95 SBWD3-24.0
Detected Volatile Organics																									
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.054 U	0.014 J	0.03 J	0.051 J	0.014 J	0.0089 J	0.0091 J	0.011 J	0.099	0.025 J	0.092 U	0.15 U	0.014 J	0.055 U	0.029 J	0.012 J	0.012 J	0.017 J	0.041 J
Benzene	840	0.1	0.1	4	**8.4**	400	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.054 U	0.0025 J	0.0055 J	0.01 J	0.055 U	0.056 U	0.055 U	0.0022 J	0.02 J	0.004 J	0.017 J	0.0063 J	0.0024 J	0.055 U	0.0052 J	0.0027 J	0.0038 J	0.0024 J	0.006 J
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.054 U	0.056 U	0.053 U	0.061 U	0.055 U	0.056 U	0.055 U	0.054 U	0.0039 J	0.062 U	0.061 U	0.15 U	0.06 U	0.055 U	0.053 U	0.052 U	0.053 U	0.052 U	0.06 U
CFC-11	260,000	52	150	- -	**5,100**	560	NA	NA	0.0053 U	NA	NA	NA	NA	NA	NA	NA	NA	0.015 U	NA	NA	NA	NA	NA	NA	0.006 U
CFC-12	170,000	95	270	- -	**1,700**	1,000	NA	NA	0.0053 U	NA	NA	NA	NA	NA	NA	NA	NA	0.015 U	NA	NA	NA	NA	NA	NA	0.006 U
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.0054 U	0.0056 U	0.0024 J	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0031 J	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0025 J	0.0052 U	0.0044 J
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl acetate	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.054 U	0.056 U	0.053 U	0.061 U	0.055 U	0.056 U	0.055 U	0.054 U	0.0025 J	0.062 U	0.061 U	0.15 U	0.06 U	0.055 U	0.053 U	0.052 U	0.053 U	0.052 U	0.06 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.054 U	0.056 U	0.053 U	0.061 U	0.055 U	0.056 U	0.055 U	0.054 U	0.056 U	0.062 U	0.003 J	0.15 U	0.06 U	0.055 U	0.053 U	0.052 U	0.053 U	0.052 U	0.06 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.0025 J	0.0023 J	0.003 J	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0075 J	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0058 J	0.0052 U	0.006 U
Toluene	160,000	16	16	5.4	**610**	250	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.012 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.015 U	0.0052 U	0.006 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	0.016 U	0.017 U	0.016 U	0.018 U	0.017 U	0.017 U	0.016 U	0.016 U	0.017 U	0.019 U	0.018 U	0.045 U	0.018 U	0.017 U	0.016 U	0.016 U	0.012 J	0.016 U	0.018 U
Detected TPH																									
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																									
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	NA	NA	0.32	NA	NA	NA	NA	NA	NA	NA	NA	0.15 J	NA	NA	NA	NA	NA	NA	0.024 J
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.034 J	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.054 J	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.054 J	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Anthracene	730,000	41	41	- -	**1,000,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Atrazine	330	0.06	0.06	0.15	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	NA	NA	0.12 J	NA	NA	NA	NA	NA	NA	NA	NA	0.063 J	NA	NA	NA	NA	NA	NA	0.2 U
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	NA	NA	0.12 J	NA	NA	NA	NA	NA	NA	NA	NA	0.093 J	NA	NA	NA	NA	NA	NA	0.2 U
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	NA	NA	0.21	NA	NA	NA	NA	NA	NA	NA	NA	0.12 J	NA	NA	NA	NA	NA	NA	0.2 U
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	NA	NA	0.042 J	NA	NA	NA	NA	NA	NA	NA	NA	0.051 J	NA	NA	NA	NA	NA	NA	0.2 U
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.049 J	NA	NA	NA	NA	NA	NA	0.2 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.17 J	NA	NA	NA	NA	NA	NA	0.2 U
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Carbazole	2,400	9.4	39	1.1	**- -**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Chrysene	8,000	- -	- -	- -	**- -**	- -	NA	NA	0.11 J	NA	NA	NA	NA	NA	NA	NA	NA	0.072 J	NA	NA	NA	NA	NA	NA	0.2 U
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	NA	NA	0.018 J	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.097 J	NA	NA	NA	NA	NA	NA	0.2 U
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2	NA	NA	NA	NA	NA	NA	0.2 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	NA	NA	0.043 J	NA	NA	NA	NA	NA	NA	NA	NA	0.046 J	NA	NA	NA	NA	NA	NA	0.2 U
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.099 J	NA	NA	NA	NA	NA	NA	0.2 U
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.39	NA	NA	NA	NA	NA	NA	0.023 J
Phenol	230,000	88	260	9	**- -**	12,000	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.2 U	NA	NA	NA	NA	NA	NA	0.2 U
Pyrene	84,000	480	480	- -	**1,000,000**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.077 J	NA	NA	NA	NA	NA	NA	0.2 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	0.0054 U	0.0056 U	0.0053 U	0.0061 U	0.0055 U	0.0056 U	0.0055 U	0.0054 U	0.0056 U	0.0062 U	0.0061 U	0.015 U	0.006 U	0.0055 U	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.006 U
Naphthalene	52,000	35	100	0.73	**470**	- -	NA	NA	0.17 U	NA	NA	NA	NA	NA	NA	NA	NA	0.05 J	NA	NA	NA	NA	NA	NA	0.2 U

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SBWD3 30 - 32 12/19/95 SBWD3-30.0	SBWD3 34 - 36 12/19/95 SBWD3-34.0	SSTT1 0 - 0.5 01/22/96 SSTT1 (0-6)	SSTT2 0 - 0.5 01/22/96 SSTT2 (0-6)	SSTT3 0 - 0.5 01/22/96 SSTT3 (0-6)	SSTT4 0 - 0.5 01/22/96 SSTT4 (0-6)	SSTT5 0 - 0.5 01/23/96 SSTT5 (0-6)	TP-W1-01 7 - 09/06/01 TPW1-01	TP-W1-01 7 - 09/06/01 TPW1-01DL	TP-W1-02 9 - 09/06/01 TPW1-02	TP-W1-02 9 - 09/06/01 TPW1-02DL	TP-W1-03 10 - 09/06/01 TPW1-03	TP-W1-03 10 - 09/06/01 TPW1-03DL
Detected Volatile Organics																			
m&p-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	73,000	15	42	34	**540,000**	110,000	0.0098 J	0.016 J	0.0068 J	0.096 J	0.0023 J [0.057 U]	0.27	0.11 [0.0084 J]	NA	1.8 U	NA	1.4 U	NA	1.1 U
Benzene	840	0.1	0.1	4	**8.4**	400	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.045 J	NA	0.36 U	NA	0.27 U
2-Butanone	700,000	260	760	44	**99,000**	27,000	0.0026 J	0.003 J	0.059 U	0.58 U	0.056 U [0.057 U]	0.046 J	0.02 J [0.055 U]	NA	1.8 U	NA	1.4 U	NA	1.1 U
Carbon Disulfide	43,000	16	46	- -	**140**	280	0.059 U	0.055 U	0.059 U	0.58 U	0.056 U [0.057 U]	0.13 U	0.055 U [0.055 U]	NA	0.44 U	NA	0.36 U	NA	0.27 U
CFC-11	260,000	52	150	- -	**5,100**	560	NA	NA	0.0059 U	NA	0.0056 U [0.0057 U]	0.013 U	NA	NA	0.88 U	NA	0.72 U	NA	0.55 U
CFC-12	170,000	95	270	- -	**1,700**	1,000	NA	NA	0.0059 U	NA	0.0056 U [0.0057 U]	0.013 U	NA	NA	0.88 U	NA	0.72 U	NA	0.55 U
Chlorobenzene	14,000	2	2	0.5	**220**	260	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.44 U	NA	0.36 U	NA	0.27 U
Chloroethane	12,000	8.6	34	22	**5,300**	950	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.88 U	NA	0.72 U	NA	0.55 U
Cyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.88 U	NA	0.72 U	NA	0.55 U
1,2-Dichlorobenzene	63,000	14	14	0.28	**20,000**	210	NA	NA	NA	NA	NA	NA	NA	NA	0.44 U	NA	0.36 U	NA	0.27 U
1,3-Dichlorobenzene	660	0.17	0.48	0.68	**48**	170	NA	NA	NA	NA	NA	NA	NA	NA	0.44 U	NA	0.36 U	NA	0.27 U
1,1-Dichloroethane	87,000	18	50	15	**430**	890	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.44 U	NA	0.36 U	NA	0.27 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	**41**	640	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	1.4	NA	0.36 U	NA	0.27 U
trans-1,2-Dichloroethene	12,000	2	2	30	**43**	1,400	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.18 J	NA	0.36 U	NA	0.27 U
Dichloromethane	5,800	0.1	0.1	30	**240**	2,300	0.0059 U	0.0055 U	0.0028 J	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.44 UJ	NA	0.36 UJ	NA	0.27 UJ
Ethylbenzene	71,000	1.5	1.5	0.36	**460**	140	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.01 J	0.0033 J [0.0055 U]	NA	0.44 U	NA	0.36 U	NA	0.27 U
Isopropylbenzene	80,000	91	260	3.2	**730**	390	NA	NA	NA	NA	NA	NA	NA	NA	0.44 U	NA	0.36 U	NA	0.27 U
Methyl acetate	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.18 J	NA	0.72 U	NA	0.55 U
Methyl N-Butyl Ketone	100,000	20	58	- -	**1,800**	2,500	0.059 U	0.055 U	0.0041 J	0.58 U	0.056 U [0.057 U]	0.13 U	0.004 J [0.055 U]	NA	1.8 U	NA	1.4 U	NA	1.1 U
Methylcyclohexane	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	0.097 J	NA	0.72 U	NA	0.55 U
4-Methyl-2-pentanone	180,000	36	100	- -	**- -**	2,700	0.059 U	0.055 U	0.059 U	0.58 U	0.056 U [0.057 U]	0.016 J	0.0042 J [0.055 U]	NA	1.8 U	NA	1.4 U	NA	1.1 U
Tetrachloroethene	930	0.1	0.1	1.2	**21**	88	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	4	NA	3.8	NA	5.6
Toluene	160,000	16	16	5.4	**610**	250	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.027	0.0083 [0.0055 U]	NA	0.11 J	NA	0.36 U	NA	0.016 J
1,1,1-Trichloroethane	1,000,000	4	4	1.8	**460**	460	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.44 U	NA	0.36 U	NA	0.27 U
Trichloroethene	660	0.1	0.1	4	**1.9**	500	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	**2.3**	NA	0.36 U	NA	0.27 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	**9,300**	550	NA	NA	NA	NA	NA	NA	NA	NA	0.44 U	NA	0.36 U	NA	0.27 U
Vinyl Chloride	34	0.04	0.04	0.26	**2.8**	490	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0057 U]	0.013 U	0.0055 U [0.0055 U]	NA	0.88 U	NA	0.72 U	NA	0.55 U
o-Xylene	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	**12,000**	150	0.018 U	0.017 U	0.018 U	0.028 J	0.017 U [0.017 U]	0.036 J	0.0012 J [0.017 U]	NA	0.38 J	NA	0.72 U	NA	0.55 U
Detected TPH																			
n-Hexane Extractable Material	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	0.41 U	NA	0.4 U	NA	0.39 U	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	**- -**	- -	NA	NA	0.25 J	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.12 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
2-Methylnaphthalene	26,000	57	170	4.2	**4,900**	- -	NA	NA	5.5	23	0.046 J [0.19 U]	2.3 J	2.4 J [2.9]	0.24 J	NA	0.4 U	NA	0.39 U	NA
2-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.93	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.26]	0.41 U	NA	0.4 U	NA	0.39 U	NA
3-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.4	NA	0.19 U [0.19 U]	7 U	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	**- -**	- -	NA	NA	0.45	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.14 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Acenaphthene	130,000	300	880	8.7	**350,000**	- -	NA	NA	0.12 J	36	0.19 U [0.19 U]	1.8 J	9.1 U [0.051 J]	0.085 J	NA	0.4 U	NA	0.39 U	NA
Acenaphthylene	5,200	5.9	17	- -	**3,000**	- -	NA	NA	0.39 U	2 J	0.19 U [0.19 U]	7 U	9.1 U [0.18 U]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Anthracene	730,000	41	41	- -	**1,000,000**	- -	NA	NA	0.29 J	21	0.02 J [0.19 U]	0.83 J	9.1 U [0.1 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Atrazine	330	0.06	0.06	0.15	**- -**	- -	NA	NA	NA	NA	NA	NA	NA	0.41 U	NA	0.4 U	NA	0.39 U	NA
Benzo(a)anthracene	80	- -	- -	- -	**- -**	- -	NA	NA	0.18 J	15	0.058 J [0.035 J]	7 U	9.1 U [0.12 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Benzo(a)pyrene	8	- -	- -	- -	**- -**	- -	NA	NA	0.094 J	8.6 J*	0.069 J [0.031 J]	7 U	9.1 U [0.073 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Benzo(b)fluoranthene	80	- -	- -	- -	**- -**	- -	NA	NA	0.14 J	11	0.12 J [0.049 J]	7 U	9.1 U [0.13 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	**- -**	- -	NA	NA	0.11 J	4.5 J	0.045 J [0.021 J]	7 U	9.1 U [0.043 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Benzo(k)fluoranthene	800	- -	- -	- -	**- -**	- -	NA	NA	0.39 U	5.3 J	0.048 J [0.025 J]	7 U	9.1 U [0.041 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	**- -**	10,000	NA	NA	0.24 J	9.6 U	0.15 J [0.11 J]	7 U	1.3 J [0.056 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	**- -**	310	NA	NA	0.24 J	2.3 J	0.19 U [0.19 U]	32	9.1 U [0.12 J]	0.17 J	NA	0.4 U	NA	0.39 U	NA
Carbazole	2,400	9.4	39	1.1	**- -**	- -	NA	NA	0.081 J	11	0.19 U [0.19 U]	7 U	9.1 U [0.04 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Chrysene	8,000	- -	- -	- -	**- -**	- -	NA	NA	0.23 J	16	0.073 J [0.044 J]	7 U	9.1 U [0.16 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	**- -**	- -	NA	NA	0.39 U	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.18 U]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Dibenzofuran	- -	- -	- -	1.7	**3,600**	- -	NA	NA	0.33 J	27	0.19 U [0.19 U]	7 U	9.1 U [0.14 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Di-n-Butylphthalate	87,000	960	2,700	11	**- -**	760	NA	NA	0.39 U	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.18 U]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	**- -**	140,000	NA	NA	0.39 U	9.6 U	0.19 U [0.19 U]	7 U	9.1 U [0.18 U]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Fluoranthene	130,000	730	730	5.5	**1,000,000**	- -	NA	NA	0.39	82	0.15 J [0.086 J]	7 U	9.1 U [0.2]	0.074 J	NA	0.4 U	NA	0.39 U	NA
Fluorene	87,000	390	890	5.3	**1,000,000**	- -	NA	NA	0.21 J	36	0.19 U [0.19 U]	9.9	3.5 J [0.078 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	**- -**	- -	NA	NA	0.057 J	3.7 J	0.04 J [0.021 J]	7 U	9.1 U [0.026 J]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Pentachloroethane	- -	- -	- -	- -	**- -**	- -	NA	NA	0.39 U	NA	0.39 U [0.19 U]	7 U	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	**5,100**	- -	NA	NA	1.3	110	0.074 J [0.065 J]	11	3.7 J [0.5]	0.14 J	NA	0.4 U	NA	0.39 U	NA
Phenol	230,000	88	260	9	**- -**	12,000	NA	NA	2.1	9.6 U	0.023 J [0.19 U]	7 U	9.1 U [0.93]	0.41 U	NA	0.4 U	NA	0.39 U	NA
Pyrene	84,000	480	480	- -	**1,000,000**	- -	NA	NA	0.36 J	50	0.14 J [0.073 J]	0.83 J	9.1 U [0.2]	0.074 J	NA	0.4 U	NA	0.39 U	NA
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	**100**	- -	0.0059 U	0.0055 U	0.0059 U	0.058 U	0.0056 U [0.0024 J]	0.013 U	0.0055 U [0.0055 U]	NA	NA	NA	NA	NA	NA
Naphthalene	52,000	35	100	0.73	**470**	- -	NA	NA	2.9	97	0.034 J [0.19 U]	7 U	9.1 U [1.5]	0.2 J	NA	0.4 U	NA	0.39 U	NA

See Notes on last page.

Table 4-19 W-01 VOC-SVOC Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
	Exceeds MDEQ 2013 Soil Saturation Concentration Screening Level
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Footnotes:

*	Result exceeds Direct Contact criteria.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-20 2 - 4 08/10/04 BCC-20B-S(2-4)081004	BCC-73 0 - 2 06/03/04 BCC-73-S(0-2)	BCC-73 5 - 7 06/03/04 BCC-73-S(5-7)	BCC-74 0 - 2 06/03/04 BCC-74-S(0-2)	BCC-74 0 - 2 08/06/04 BCC-74B-S(0-2)080604	BCC-74 5 - 7 06/03/04 BCC-74-S(5-7)	BCC-74 6.75 - 8 08/06/04 BCC-74B-S(6.75-8)080604	BCC-74-1 0 - 2 08/11/04 BCC-74-1-S(0-2)081104	BCC-74-1 6 - 8 08/11/04 BCC-74-1-S(6-8)081104
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.861 J	R [R]	R	R	NA	R	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	3.97	4.13 J [5.3 J]	7.39 J	91.9 J*	2.92	6.81 J	4.27	14.3	4.77
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	124 J	48.3 J [40.9 J]	81.3 J	39.6 J	NA	50.4 J	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.367	0.116 U [0.37 J]	0.276 J	0.217 J	NA	0.348 J	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.437 J	0.368 J [0.0461 J]	0.606 J	0.628 J	NA	0.584 J	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	30.6	10.9 J [11.8 J]	16.8 J	10.5 J	NA	16.7 J	NA	NA	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	5.57	5.44 J [6.89 J]	10.6 J	4.35 J	NA	6.73 J	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	34.5	9.53 J [7.78 J]	17.5 J	31.1 J	NA	18.8 J	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	22.5	16.2 J [11.6 J]	9.94 J	38 J	NA	7.9 J	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	640	186 J [270 J]	519 J	177 J	NA	212 J	NA	NA	NA
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0764 J	0.0353 J [0.0178 J]	0.0187 J	0.182	NA	0.0347 J	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	21.3	9.47 J [9.92 J]	18.1 J	13.2 J	NA	19 J	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.571 U	0.58 U [0.537 J]	0.623 U	0.572 U	NA	0.597 U	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.571 U	0.58 U [0.565 U]	0.623 U	0.572 U	NA	0.597 U	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.14 U	1.16 U [1.13 UJ]	1.25 U	1.44 U	NA	1.19 U	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	14.2	16.5 J [17.6 J]	26.4 J	15.1 J	NA	23 J	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	57.5	40.9 J [33.4 J]	38 J	40.1 J	NA	42.6 J	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-74-1 8 - 10 08/11/04 BCC-74-1-S(8-10)081104	BCC-74-2 0 - 2 08/11/04 BCC-74-2-S(0-2)081104	BCC-74-2 6.5 - 8 08/11/04 BCC-74-2-S(6.5-8)081104	BCC-74-2 8 - 10 08/11/04 BCC-74-2-S(8-10)081104	BCC-74-3 0 - 2 08/06/04 BCC-74-3-S(0-2)080604	BCC-74-3 7.2 - 8 08/06/04 BCC-74-3-S(7.2-8)080604	BCC-74-4 0 - 2 08/11/04 BCC-74-4-S(0-2)081104	BCC-74-4 6 - 8 08/11/04 BCC-74-4-S(6-8)081104
Detected Inorganics																		
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	4.01	3.8	4.53	3.43	3.06	4.26	6.26	3.83
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-74-4 8 - 10 08/11/04 BCC-74-4-S(8-10)081104	BW8-01 2 - 4 09/05/01 BW8-01-S(2-4)	BW8-01 8 - 10 09/05/01 BW8-01-S(8-10)	BW8-01 10 - 12 09/06/01 BW8-01-S(10-12)	BW8-02 0 - 2 09/05/01 BW8-02-S(0-2)	BW8-02 8 - 10 09/05/01 BW8-02-S(8-10)	BW8-03 0.5 - 2 07/28/03 BW803S(0-2)	BW8-03 0.5 - 2 07/28/03 BW803S(0-2)DL	BW8-03 3 - 5 07/28/03 BW803S(3-5)	BW8-03 8 - 10 07/28/03 BW803S(8-10)	BW8-04 0 - 2 07/22/03 BW804S(0-2)	BW8-04 5 - 7 07/22/03 BW804S(5-7)
Detected Inorganics																						
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	2.25 U	2.13 U	2.38 U	2.19 U	0.583 J	NA	1.97 J	1.52 J	0.301 J	0.22 J	1.73 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	4.13	3.83	2.91	4.23	4.6	3.63	NA	7.2	7.08	5.3	7.48	5.67 E
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	10.7	20.6	24.8	39.1	37.4	99.5 J	NA	131 J	38.6 J	30.9 J	79.2 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	0.112 U	0.107 U	0.0804 J	0.157	0.0532 J	0.161	NA	0.419	0.182	0.093 J	0.116 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	0.152 J	0.165 J	0.595 U	0.305 J	0.338 J	NA	2.72 U	0.357 J	0.0396 J	0.157 J	0.592
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	5.45	7.7	8.43	12.1	15.7	NA	153 J	16.4 J	13.4 J	10.1	40.7 E
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	2.47	1.73	4.79	5.09	3.21	5.63	NA	4.51	6.8	4.36	5.12 E
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	5.82	11	10.5	12.5	9.5	92.9	NA	44.9	16.2	11.2	24.4
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	3.85	7.63	4.75	15.4	24	NA	39.8	56.3	6.78	9.62	81.6 E
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	127	114	273	315	353	NA	*1,660 J*	276 J	349 J	397 J	744 JE
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	0.0371 U	0.0352 U	0.0393 U	0.0361 U	0.0461	0.045	NA	0.201	0.0203 J	0.0346 U	0.0404
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	6.02	5.65	12.4	12.4	7.92	82	NA	27.5	18.2	10.8	13.6 E
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	0.562 U	0.533 U	0.595 U	0.547 U	0.576 U	NA	2.72 U	0.88	0.58 U	0.525 U	0.578 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	0.562 U	0.533 U	0.595 U	0.547 U	0.576 U	0.543 U	NA	0.0596 J	0.58 U	0.525 U	0.578 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	1.12 U	1.07 U	1.19 U	1.09 U	1.15 U	NA	5.43 UJ	0.566 J	0.461 J	0.422 J	0.826 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	9.97	4.94	11.4	15	14.8	NA	14.5	17.7	18.2	13.2	35.8
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	23.9	28.1	30.6	40.2	40.1	NA	68.8	63.2	40.9	35.8	98.6

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-05 0.7 - 2 07/22/03 BW805S(0-2)	BW8-05 7 - 9 07/22/03 BW805S(7-9)	BW8-06 0.5 - 2 07/28/03 BW806S(0-2)	BW8-06 0.5 - 2 07/28/03 BW806S(0-2)DL	BW8-06 2 - 4 07/28/03 BW806S(2-4)	BW8-06 2 - 4 07/28/03 BW806S(2-4)DL	BW8-06 6 - 8 07/28/03 BW806S(6-8)	BW8-06 6 - 8 07/28/03 BW806S(6-8)DL	BW8-108 0 - 2 08/02/05 BW8-108-S(0-2)080205	BW8-108 8 - 10 08/02/05 BW8-108-S(8-10)080205
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.179 J	0.262 J [2.21 U]	NA	5.33 J	NA	31.5 J	NA	101 J	0.43 J	1.1 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	3.91	3.64 [3.75]	NA	25.5	NA	16.1	NA	54*	3.6	3.6
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	46.3 J	31.6 J [27.4 J]	432 J	NA	NA	4,040 J	429 J	NA	46.5	29.7
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0955 J	0.0454 J [0.111 U]	0.119 U	NA	0.044 J	NA	0.113 U	NA	0.12 U	0.17 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.559 U	0.555 U [0.553 U]	NA	5.94 U	NA	38.5	NA	11.3 U	0.53 J	0.43 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	12	10.9 [9.48]	NA	*726 J*	NA	*363 J*	NA	123 J	12.5	10.6
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	6.65	4.39 [3.71]	20.2	NA	7.79	NA	64.2	NA	5.0 J	5.2 J
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	12.4	10.7 [10.6]	1,570	NA	NA	4,930	NA	25,800	13.5 J	12.0 J
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	5.53	5.01 [4.27]	NA	179	NA	2,820	NA	8,440	18.1	5.0
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	276 J	187 J [186 J]	NA	*1,990 J*	NA	777 J	NA	*1,600 J*	239 J	239 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0369 U	0.0367 U [0.0365 U]	0.269	NA	NA	6.55	0.0223 J	NA	0.13	0.019 J
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	14.6	12.2 [10.6]	424	NA	251	NA	151	NA	13.1	13.6
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.559 U	0.555 U [0.553 U]	NA	5.94 U	NA	11.2 U	NA	4.89 J	0.56 U	0.55 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.559 U	0.555 U [0.553 U]	0.594 U	NA	0.765	NA	2.61	NA	0.56 U	0.55 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	0.476 J	0.704 J [0.979 J]	NA	11.9 UJ	NA	22.4 UJ	NA	22.7 UJ	1.1 U	1.1 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	15.3	15.6 [13.3]	NA	25.3	NA	25.1	NA	52	15.4	16.1
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	36.3	28.3 [28.5]	NA	192	NA	5,820	NA	5,080	40.5	27.9

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-118 0 - 2 08/25/05 BW8-118R-S(0-2)082505	BW8-118 8 - 10 08/25/05 BW8-118R-S(8-10)082505	BW8-118 12 - 14 08/25/05 BW8-118R-S(12-14)082505	MWW8-01 0.7 - 2 08/29/01 BMWW8-01-S(0-2)	MWW8-01 8 - 10 08/29/01 BMWW8-01-S(8-10)	MWW8-01 10 - 12 08/29/01 BMWW8-01-S(10-12)	MWW8-02 0.5 - 2 08/29/01 BMWW8-02-S(0-2)	MWW8-02 0.5 - 2 08/29/01 BMWW8-02-S(0-2)DL
Detected Inorganics																		
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	1.2 U	1.1 U	1.1 U	0.972 J	2.34 U	2.18 U	NA	7.46 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	4.4	5.8	6.3	4.99	2.54	2.17	NA	36.2
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	37.9	33.4	19.6	28.2	8.75	7.06	509	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.34 U	0.35 U	0.30 U	0.123 U	0.117 U	0.109 U	0.119 U	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.32 J	0.41 J	0.29 J	0.0586 J	0.0793 J	0.545 U	NA	5.93 U
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	12.2	13.0	8.9	14.6	4.17	4.88	NA	*857*
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	4.3	6.4	4.8	3.58 J	2.35	2.06	40.6	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	14.5	15.7	13.2	15.8	9.32	7.53	NA	1,920
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	8.8	6.1	7.3	13.9	3.24	3.01	NA	587
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	344	307	234	351	221	149	NA	*2,780*
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.021 J	0.037 U	0.021 J	0.117	0.0386 U	0.036 U	0.699	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	11.0	17.2	11.5	11.1	5.74	4.82	1,890	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.58 U	0.56 U	0.56 U	0.615 U	0.585 U	0.545 U	NA	8.62
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.58 U	0.56 U	0.56 U	0.615 U	0.585 U	0.545 U	NA	0.925 J
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.2 U	1.1 U	1.1 U	1.23 U	1.17 U	0.777 J	NA	11.9 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	13.6	15.6	16.2	12.7	7.65	6.18	NA	29.3
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	30.5 E	41.8	31.9	47.2 J	21.6	17.8	NA	379

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-02 6 - 8 08/29/01 BMWW8-02-S(6-8)	MWW8-02 8 - 10 08/29/01 BMWW8-02-S(8-10)	MWW8-02 12 - 14 08/29/01 BMWW8-02-S(12-14)	MWW8-03 2 - 4 09/04/01 BMWW8-03-S(2-4)	MWW8-03 8 - 10 09/04/01 BMWW8-03-S(8-10)	MWW8-03 24 - 26 09/04/01 BMWW8-03-S(24-26)	MWW8-04 2 - 4 09/04/01 BMWW8-04-S(2-4)-N	MWW8-04 8 - 10 09/04/01 BMWW8-04-S(8-10)	MWW8-04 10 - 12 09/04/01 BMWW8-04-S(10-12)
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.44 U	2.29 U	2.34 U	2.1 U	2.34 U	2.27 U	0.585 U	2.29 U	2.28 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	7.49	2.5	5.05	3.89	2.84	6.07	4.3	4.35	4.14
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	85.9	67	121	14.7	9.93	31.1	37.7	30.3	42.2
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.29	0.161	0.153	0.105 U	0.117 U	0.125	0.165	0.114 U	0.167
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.61 U	0.212 J	5.46	0.142 J	0.111 J	0.341 J	0.292 J	0.176 J	0.354 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	156	156	17.6	7.19	5.2	10.1	12.1	9.27	12.5
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	8.34	6.14	7.5	3.01	2.56	5.99	5.97	3.99 J	5.81
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	20	21.9	205	9.46	8.26	15	12.1	11.2	13
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	14.7	10.4	31	8.36	2.03	5.97	7.31	10.2	5.92
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	236	230	337	174	174	258	558	242	307
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0983	0.0815	0.272	0.0218 J	0.0117 J	0.0172 J	0.0211 J	0.0178 J	0.0248 J
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	16.6	16.2	28.5	8.91	5.62	17.8	13.8	8.85 J	14.8
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.622	0.573 U	0.586 U	0.524 U	0.584 U	0.556 J	0.37 U	0.572 U	0.571 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.61 U	0.573 U	0.586 U	0.524 U	0.584 U	0.568 U	0.179 U	0.572 U	0.571 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.22 U	1.15 U	1.17 U	1.05 U	1.17 U	1.14 U	0.615 J	1.14 U	1.14 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	29.2	14.6	19.1	8.94	8.68	15.1	17.2	11.2	16.3
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	48.5	40.6	192	24.2	23.6	39.7	35.2	27.4 J	36.1

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)DL	MWW8-05 8 - 10 08/20/01 BMWW8-05-S(8-10)	MWW8-09 0.9 - 2 01/28/02 BMWW8-09-S(0-2)	MWW8-09 8 - 10 01/28/02 BMWW8-09-S(8-10)	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)	MWW8-10 12 - 14 01/29/02 BMWW8-10-S(12-14)	MWW8-11 0.8 - 2 02/04/02 BMWW8-11-0-2	MWW8-11 8 - 10 02/04/02 BMWW8-11-8-10	MWW8-12 1 - 3 02/06/02 BMWW8-12-1-3
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	1.41 J	2.18 U	2.46 U	2.21 U	0.604 J	0.334 J	2.37 U	2.28 U	2.26 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	26.9	6.02	6.74	3.06	3.58	3.53	4.68	4.79	5.12
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	124	NA	19.7	47.2	26.1	32.1	23.2	169 J	17.5 J	33.6
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.931	NA	0.0605 J	0.285	0.117	0.0386 J	0.0882 J	1.07	0.105 J	0.131
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	0.989 J	0.145 J	0.199 J	0.16 J	0.0861 J	0.103 J	0.148 J	0.149 J	0.241 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	112	8.44	14.8	10.4	19.8	7.83	8.1	9.95	10.5
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	6.93	NA	3.96	8.05	4.66	2.62	3.42	2.85	5.1	5.12
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	91.3	NA	11.3	18.2	10.1	31.6	8.78	11.8	10.9	15.2
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	94.6	5.76	8.5	5.76	31.6	4.79	4.39	5.99	6.94
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	1,290	251	409	235	417	358	353	179	229
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.531	NA	0.0311 J	0.0406 U	0.0365 U	0.0876	0.0371 U	0.0363 J	0.0144 J	0.0373 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	41.8	NA	9.95 J	20.6	12.4	19.6	9.31	8.4	12.6 J	14.7
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	0.627 J	0.545 U	0.615 U	0.553 U	0.328 J	0.222 J	0.223 J	0.239 J	0.193 J
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.563 U	NA	0.545 U	0.615 U	0.553 U	0.573 U	0.563 U	0.592 U	0.569 U	0.565 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	0.843 J	1.09 U	0.775 J	0.613 J	0.696 J	0.601 J	0.596 J	0.512 J	0.696 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	11.8	11.2	20.6	14.4	7.14	13.2	11.4	16.5	17.2
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	146	31.1	42.9	28.3	30.9	27.6	23.7	30.9	39.1

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-12 8 - 10 02/06/02 BMWW8-12-8-10	MWW8-13 0.7 - 2 05/29/03 MWW813S(0-2)	MWW8-13 8 - 10 05/29/03 MWW813S(8-10)	MWW8-13 15 - 17 05/29/03 MWW813S(15-17)	MWW8-29 0.6 - 2 11/11/04 MWW8-29-S(0-2)-111104	MWW8-29 8 - 10 11/11/04 MWW8-29-S(8-10)-111104	MWW8-29 11 - 13 11/11/04 MWW8-29-S(11-13)-111104	SW8-03 0.7 - 2 01/14/02 SW8-03-S(0-2)	SW8-03 0.7 - 2 01/14/02 SW8-03-S(0-2)DL
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.36 U [2.36 U]	0.722 J	0.353 J	0.381 J	0.64 J	1.2 U	0.38 J	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	5.08 [4.8]	3.42	4.82	5.11	2.7	8.0	2.8	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	42.8 [45.8]	28.7 J	43 J	46.1 J	52.3	49.2	23.0	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.298 [0.171]	0.108 UJ	0.171 J	0.144 J	0.11 U	0.13	0.11 U	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.112 J [0.191 J]	0.252 J	0.274 J	0.263 J	0.54 U	0.60 U	0.57 U	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	15.2 J [9.72]	21.5 J	16.3 J	16.5 J	26.3	18.0	7.4	NA	*1,260*
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	R	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	7.68 J [5.83]	2.9	7.88	6.71	2.2	8.7	3.6	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	15 [12.1]	24.6	16.7	16.9	23.7	20.3	5.2	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	8.47 J [15.1]	21.9	7.91	7.67	17.8	9.2	8.2	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	183 J [261]	507 J	652 J	535 J	633	429	117	NA	*1,710*
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0116 J [0.0156 J]	0.0461	0.0387 U	0.0249 J	0.30	0.026 J	0.033 J	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	16.5 J [11.4]	15	19	18.8	15.1	22.8	6.6	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.221 J [0.59 U]	0.541 U	0.586 U	0.6 U	0.54 U	0.60 U	0.57 U	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.589 U [0.59 U]	0.541 U	0.586 U	0.6 U	0.54 U	0.60 U	0.57 U	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	0.382 J [0.628 J]	1.57 J	2.12 J	2.1 J	0.93 J	0.73 J	0.46 J	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	21.3 [12.5]	10	22.4	22.7	7.1	24.9	11.7	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	34.3 J [45.4]	29.9 J	44.3 J	46.7 J	27.5 J	49.2 J	24.1 J	NA	NA

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW8-04 0 - 2 01/14/02 SW8-04-S(0-2)	SW8-04 0 - 2 01/14/02 SW8-04-S(0-2)DL	SW8-05 0.5 - 2 01/14/02 SW8-05-S(0-2)	SW8-05 0.5 - 2 01/14/02 SW8-05-S(0-2)DL	SW8-06 0 - 2 01/14/02 SW8-06-S(0-2)	SW8-06 0 - 2 01/14/02 SW8-06-S(0-2)DL	SW8-07 0 - 2 02/04/02 SW8-07-S(0-2)DL	SW8-08 0 - 2 02/04/02 SW8-08-S(0-2)DL	SW8-09 0.5 - 2 02/04/02 SW8-09-S(0-2)DL	SW8-10 0.5 - 2 02/07/02 SW8-10-S(0-2)
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	*264*	NA	*433* [203]	NA	32	NA	NA	NA	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	R	NA	0.711 J [2.04 J]	NA	0.6 J	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	*2,770*	NA	*1,750* [952]	NA	321	866	1,170	*2,040*	131 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Inorganic Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Footnotes:

*	Result exceeds Direct Contact criteria.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-20 2 - 4 08/10/04 BCC-20B-S(2-4)081004	BCC-20 6.5 - 8 08/10/04 BCC-20B-S(6.5-8)081004	BCC-20 13 - 13.5 08/10/04 BCC-20B-S(13-13.5)081004	BCC-21 0.5 - 1.5 06/02/04 BCC-21-S(0.5-1.5)	BCC-21-2 6 - 8 07/28/04 BCC212S6-8	BCC-25 0.9 - 2 06/02/04 BCC-25-S(1-2)	BCC-25 7 - 8 07/28/04 BCC25BS7-8	BCC-25 8 - 8.25 07/28/04 BCC25BS8-8.25	BCC-25-1 1.2 - 3.2 07/27/04 BCC251S1.2-3.2	BCC-25-1 4 - 5 07/27/04 BCC251S4-5
Detected Solids																					
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.6	88.9	84.9	92.0	83.5 [85]	84.7	86.2	86.9	90.8	88.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-25-2 1.2 - 3.2 07/27/04 BCC252S1.2-3.2	BCC-25-4 0.9 - 2.9 07/27/04 BCC254S0.9-2.9	BCC-25-4 6 - 8 07/27/04 BCC254S6-8	BCC-25-4 8 - 8.5 07/27/04 BCC254S8-8.5	BCC-73 0 - 2 06/03/04 BCC-73-S(0-2)	BCC-73 5 - 7 06/03/04 BCC-73-S(5-7)	BCC-74 0 - 2 06/03/04 BCC-74-S(0-2)	BCC-74 0 - 2 08/06/04 BCC-74B-S(0-2)080604	BCC-74 5 - 7 06/03/04 BCC-74-S(5-7)	BCC-74 6.75 - 8 08/06/04 BCC-74B-S(6.75-8)080604
Detected Solids																					
Total Solids	--	--	--	--	--	--	--	--	--	--	%	85.5	86.4	88.1	83.4	86.2 [88.4]	80.3	87.4	86.5	83.7	89.7
Total solids (residue)	--	--	--	--	--	--	--	--	--	--	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-74-1 0 - 2 08/11/04 BCC-74-1-S(0-2)081104	BCC-74-1 6 - 8 08/11/04 BCC-74-1-S(6-8)081104	BCC-74-1 8 - 10 08/11/04 BCC-74-1-S(8-10)081104	BCC-74-2 0 - 2 08/11/04 BCC-74-2-S(0-2)081104	BCC-74-2 6.5 - 8 08/11/04 BCC-74-2-S(6.5-8)081104	BCC-74-2 8 - 10 08/11/04 BCC-74-2-S(8-10)081104	BCC-74-3 0 - 2 08/06/04 BCC-74-3-S(0-2)080604
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	85.4	88.3	90.0	90.4	88.6	88.7	81.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-74-3 7.2 - 8 08/06/04 BCC-74-3-S(7.2-8)080604	BCC-74-3 13 - 15 08/06/04 BCC-74-3-S(13-15)080604	BCC-74-4 0 - 2 08/11/04 BCC-74-4-S(0-2)081104	BCC-74-4 6 - 8 08/11/04 BCC-74-4-S(6-8)081104	BCC-74-4 8 - 10 08/11/04 BCC-74-4-S(8-10)081104	BW8-01 2 - 4 09/05/01 BW8-01-S(2-4)	BW8-01 8 - 10 09/05/01 BW8-01-S(8-10)	BW8-01 10 - 12 09/06/01 BW8-01-S(10-12)	BW8-02 0 - 2 09/05/01 BW8-02-S(0-2)
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.2	88.5	90.9	88.6	90.1	89.0	93.8	84.0	91.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW8-02 8 - 10 09/05/01 BW8-02-S(8-10)	BW8-03 0.5 - 2 07/28/03 BW803S(0-2)	BW8-03 3 - 5 07/28/03 BW803S(3-5)	BW8-03 8 - 10 07/28/03 BW803S(8-10)	BW8-04 0 - 2 07/22/03 BW804S(0-2)	BW8-04 5 - 7 07/22/03 BW804S(5-7)	BW8-05 0.7 - 2 07/22/03 BW805S(0-2)	BW8-05 7 - 9 07/22/03 BW805S(7-9)	BW8-06 0.5 - 2 07/28/03 BW806S(0-2)	BW8-06 2 - 4 07/28/03 BW806S(2-4)	BW8-06 6 - 8 07/28/03 BW806S(6-8)	BW8-108 0 - 2 08/02/05 BW8-108-S(0-2)080205
Detected Solids																							
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.8	92.0	85.1	86.3	95.3	86.6	89.5	90.0 [90.4]	84.1	89.1	88.1	89.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW8-108 8 - 10 08/02/05 BW8-108-S(8-10)080205	BW8-109 0 - 2 08/25/05 BW8-109R-S(0-2)082505	BW8-109 8 - 10 08/25/05 BW8-109R-S(8-10)082505	BW8-109 14 - 16 08/25/05 BW8-109R-S(14-16)082505	BW8-111 0 - 2 08/25/05 BW8-111R-S(0-2)082505	BW8-111 8 - 10 08/25/05 BW8-111R-S(8-10)082505	BW8-111 12 - 14 08/25/05 BW8-111R-S(12-14)082505
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.2	88.8	90.5	89.2	89.3	89.9	89.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW8-112 0 - 2 08/03/05 BW8-112-S(0-2)-080305	BW8-112 8 - 10 08/03/05 BW8-112-S(8-10)-080305	BW8-112 17 - 19 08/03/05 BW8-112-S(17-19)-080305	BW8-116 0 - 2 08/05/05 BW8-116(0-2)-S-080505	BW8-116 8 - 10 08/05/05 BW8-116(8-10)-S-080505	BW8-116 19 - 20 08/05/05 BW8-116(19-20)-S-080505	BW8-117 0 - 2 08/08/05 BW8-117-S(0-2)080805
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.5	89.0	92.0	86.8	85.0	91.8	91.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW8-117 38 - 40 08/08/05 BW8-117-S(38-40)080805	BW8-118 0 - 2 08/25/05 BW8-118R-S(0-2)082505	BW8-118 8 - 10 08/08/05 BW8-118-S(8-10)080805	BW8-118 8 - 10 08/25/05 BW8-118R-S(8-10)082505	BW8-118 12 - 14 08/25/05 BW8-118R-S(12-14)082505	BW8-119 0 - 2 08/11/05 BW8-119-S(02)081105	BW8-121 0 - 2 08/16/05 BW8-121-S-(0-2)081605
Detected Solids																		
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	93.7	86.7	91.1	89.2	89.6	86.4	90.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW8-121 8 - 10 08/16/05 BW8-121-S-(8-10)081605	BW8-121 23 - 25 08/16/05 BW8-121-S-(23-25)081605	BW8-123 0 - 2 08/25/05 BW8-123R-S(0-2)082505	BW8-123 8 - 10 08/25/05 BW8-123R-S(8-10)082505	BW8-123 12 - 14 08/25/05 BW8-123R-S(12-14)082505	MWW8-01 0.7 - 2 08/29/01 BMWW8-01-S(0-2)	MWW8-01 8 - 10 08/29/01 BMWW8-01-S(8-10)	MWW8-01 10 - 12 08/29/01 BMWW8-01-S(10-12)
Detected Solids																			
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.4	93.9	89.7	88.9	90.0	81.3	85.4	91.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW8-02 0.5 - 2 08/29/01 BMWW8-02-S(0-2)	MWW8-02 6 - 8 08/29/01 BMWW8-02-S(6-8)	MWW8-02 8 - 10 08/29/01 BMWW8-02-S(8-10)	MWW8-02 12 - 14 08/29/01 BMWW8-02-S(12-14)	MWW8-03 2 - 4 09/04/01 BMWW8-03-S(2-4)	MWW8-03 8 - 10 09/04/01 BMWW8-03-S(8-10)	MWW8-03 24 - 26 09/04/01 BMWW8-03-S(24-26)	MWW8-04 2 - 4 09/04/01 BMWW8-04-S(2-4)-N	MWW8-04 8 - 10 09/04/01 BMWW8-04-S(8-10)
Detected Solids																				
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	84.3	82.0	87.2	85.3	95.4	85.6	88.0	NA	87.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	83.8	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW8-04 10 - 12 09/04/01 BMWW8-04-S(10-12)	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)	MWW8-05 8 - 10 08/20/01 BMWW8-05-S(8-10)	MWW8-09 0.9 - 2 01/28/02 BMWW8-09-S(0-2)	MWW8-09 8 - 10 01/28/02 BMWW8-09-S(8-10)	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)	MWW8-10 12 - 14 01/29/02 BMWW8-10-S(12-14)	MWW8-12 1 - 3 02/06/02 BMWW8-12-1-3	MWW8-12 8 - 10 02/06/02 BMWW8-12-8-10	MWW8-13 0.7 - 2 05/29/03 MWW813S(0-2)
Detected Solids																					
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.5	88.8	91.8	81.2	90.4	87.2	88.9	88.6	84.9 [84.8]	92.5
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW8-13 8 - 10 05/29/03 MWW813S(8-10)	MWW8-13 15 - 17 05/29/03 MWW813S(15-17)	MWW8-29 0.6 - 2 11/11/04 MWW8-29-S(0-2)-111104	MWW8-29 8 - 10 11/11/04 MWW8-29-S(8-10)-111104	MWW8-29 11 - 13 11/11/04 MWW8-29-S(11-13)-111104	SW8-03 0.7 - 2 01/14/02 SW8-03-S(0-2)	SW8-04 0 - 2 01/14/02 SW8-04-S(0-2)	SW8-05 0.5 - 2 01/14/02 SW8-05-S(0-2)	SW8-06 0 - 2 01/14/02 SW8-06-S(0-2)	SW8-10 0.5 - 2 02/07/02 SW8-10-S(0-2)
Detected Solids																					
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	85.4	83.3	93.2	83.7	87.9	86.7	89.7	87.3 [84.4]	88.8	91.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-26 W-08 Misc. Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-20 2 - 4 08/10/04 BCC-20B-S(2-4)081004R2	BCC-21 0.5 - 1.5 06/02/04 BCC-21-S(0.5-1.5)	BCC-21-2 6 - 8 07/28/04 BCC212S6-8	BCC-25 0.9 - 2 06/02/04 BCC-25-S(1-2)DL	BCC-25 7 - 8 07/28/04 BCC25BS7-8	BCC-25 8 - 8.25 07/28/04 BCC25BS8-8.25	BCC-25-1 1.2 - 3.2 07/27/04 BCC251S1.2-3.2	BCC-25-1 4 - 5 07/27/04 BCC251S4-5	BCC-25-2 1.2 - 3.2 07/27/04 BCC252S1.2-3.2	BCC-25-4 0.9 - 2.9 07/27/04 BCC254S0.9-2.9	BCC-25-4 6 - 8 07/27/04 BCC254S6-8	BCC-25-4 8 - 8.5 07/27/04 BCC254S8-8.5
Detected PCBs																						
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	R	0.04 U [0.039 UJ]	R	R	0.038 U	0.036 U	0.037 U	0.039 U	0.038 U	0.037 U	0.04 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	R	0.04 U [0.039 UJ]	R	R	0.038 U	0.036 U	0.037 U	0.039 U	0.038 U	0.037 U	0.04 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.42 J	0.04 U [0.039 UJ]	R	R	0.038 U	0.036 U	0.037 U	0.083 J	0.038 U	0.037 U	0.04 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	R	0.04 U [0.039 UJ]	2 J	0.052 J	0.13	0.036 U	0.037 U	0.039 U	0.013 J	0.037 U	0.055
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.42 J	0.04 U [0.039 U]	2 J	0.052 J	0.13	0.036 U	0.037 U	0.083 J	0.013 J	0.037 U	0.055

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-73 0 - 2 06/03/04 BCC-73-S(0-2)	BCC-73 5 - 7 06/03/04 BCC-73-S(5-7)	BCC-74 0 - 2 06/03/04 BCC-74-S(0-2)	BCC-74 5 - 7 06/03/04 BCC-74-S(5-7)	BW8-01 2 - 4 09/05/01 BW8-01-S(2-4)	BW8-01 8 - 10 09/05/01 BW8-01-S(8-10)	BW8-01 10 - 12 09/06/01 BW8-01-S(10-12)	BW8-02 0 - 2 09/05/01 BW8-02-S(0-2)	BW8-02 8 - 10 09/05/01 BW8-02-S(8-10)	BW8-03 0.5 - 2 07/28/03 BW803S(0-2)	BW8-03 3 - 5 07/28/03 BW803S(3-5)	BW8-03 8 - 10 07/28/03 BW803S(8-10)	BW8-04 0 - 2 07/22/03 BW804S(0-2)
Detected PCBs																							
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U [0.037 U]	0.041 U	0.038 U	0.039 U	0.037 U	0.035 U	0.039 U	0.036 U	0.038 U	0.036 U	0.039 U	0.038 U	0.035 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U [0.037 U]	0.041 U	0.038 U	0.039 U	0.037 U	0.035 U	0.039 U	0.036 U	0.27	0.036 U	0.076	0.038 U	0.035 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U [0.037 U]	0.041 U	0.038 U	0.039 U	0.037 U	0.035 U	0.039 U	0.033 J	0.038 U	0.036 U	0.039 U	0.038 U	0.048
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U [0.037 U]	0.041 U	0.038 U	0.039 U	0.037 U	0.035 U	0.039 U	0.036 U	0.038 U	0.011 J	0.061	0.038 U	0.035 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U [0.037 U]	0.041 U	0.038 U	0.039 U	0.037 U	0.035 U	0.039 U	0.033 J	0.27	0.011 J	0.137	0.038 U	0.048

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-04 5 - 7 07/22/03 BW804S(5-7)	BW8-05 0.7 - 2 07/22/03 BW805S(0-2)	BW8-05 7 - 9 07/22/03 BW805S(7-9)	BW8-06 0.5 - 2 07/28/03 BW806S(0-2)	BW8-06 2 - 4 07/28/03 BW806S(2-4)	BW8-06 6 - 8 07/28/03 BW806S(6-8)	BW8-108 0 - 2 08/02/05 BW8-108-S(0-2)080205	BW8-108 8 - 10 08/02/05 BW8-108-S(8-10)080205	BW8-109 0 - 2 08/25/05 BW8-109R-S(0-2)082505	BW8-109 8 - 10 08/25/05 BW8-109R-S(8-10)082505
Detected PCBs																				
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.037 U [0.037 U]	0.039 U	0.037 U	0.037 U	0.037 U	0.067	0.037 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.24	0.037 U	0.037 U [0.037 U]	0.03 J	0.095	0.037 U	0.037 U	0.037 U	0.0077 J	0.03 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.037 U [0.037 U]	0.039 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.082	0.037 U	0.037 U [0.037 U]	0.039 U	0.038	0.037 U	0.037 U	0.037 U	0.037 U	0.036 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.322	0.037 U	0.037 U [0.037 U]	0.03 J	0.133	0.037 U	0.037 U	0.067	0.0077 J	0.03 J

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-109 14 - 16 08/25/05 BW8-109R-S(14-16)082505	BW8-111 0 - 2 08/25/05 BW8-111R-S(0-2)082505	BW8-111 8 - 10 08/25/05 BW8-111R-S(8-10)082505	BW8-111 12 - 14 08/25/05 BW8-111R-S(12-14)082505	BW8-112 0 - 2 08/03/05 BW8-112-S(0-2)-080305	BW8-112 8 - 10 08/03/05 BW8-112-S(8-10)-080305	BW8-112 17 - 19 08/03/05 BW8-112-S(17-19)-080305	BW8-116 0 - 2 08/05/05 BW8-116(0-2)-S-080505
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.037 U	0.037 U	0.038 U	0.037 U	0.036 U	0.038 UJ
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.0061 J	0.01 J	0.037 U	0.037 U	0.038 U	0.037 U	0.036 U	0.0062 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.037 U	0.037 U	0.038 U	0.037 U	0.036 U	0.038 UJ
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.037 U	0.037 U	0.038 U	0.037 U	0.036 U	0.038 UJ
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.0061 J	0.01 J	0.037 U	0.037 U	0.038 U	0.037 U	0.036 U	0.0062 J

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-116 8 - 10 08/05/05 BW8-116(8-10)-S-080505	BW8-116 19 - 20 08/05/05 BW8-116(19-20)-S-080505	BW8-117 0 - 2 08/08/05 BW8-117-S(0-2)080805	BW8-117 38 - 40 08/08/05 BW8-117-S(38-40)080805	BW8-118 0 - 2 08/25/05 BW8-118R-S(0-2)082505	BW8-118 8 - 10 08/08/05 BW8-118-S(8-10)080805	BW8-118 8 - 10 08/25/05 BW8-118R-S(8-10)082505	BW8-118 12 - 14 08/25/05 BW8-118R-S(12-14)082505
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 UJ	0.036 U	0.036 U	0.015 J	0.038 U	0.036 U	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.012 J	0.019 J	0.036 U	0.035 U	0.02 J	0.036 U	0.037 U	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 UJ	0.036 U	0.036 U	0.035 U	0.038 U	0.036 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 UJ	0.036 U	0.014 J	0.035 U	0.011 J	0.036 U	0.037 U	0.037 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.012 J	0.019 J	0.014 J	0.015 J	0.031 J	0.036 U	0.037 U	0.037 U

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-119 0 - 2 08/11/05 BW8-119-S(02)081105	BW8-121 0 - 2 08/16/05 BW8-121-S-(0-2)081605	BW8-121 8 - 10 08/16/05 BW8-121-S-(8-10)081605	BW8-121 23 - 25 08/16/05 BW8-121-S-(23-25)081605	BW8-123 0 - 2 08/25/05 BW8-123R-S(0-2)082505	BW8-123 8 - 10 08/25/05 BW8-123R-S(8-10)082505	BW8-123 12 - 14 08/25/05 BW8-123R-S(12-14)082505	MWW8-01 0.7 - 2 08/29/01 BMWW8-01-S(0-2)
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.044	0.037 U	0.036 U	0.035 U	0.037 U	0.037 U	0.037 U	0.041 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.036 U	0.035 U	0.11	0.037 U	0.037 U	0.041 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.036 U	0.035 U	0.037 U	0.037 U	0.037 U	0.041 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.017 J	0.037 U	0.036 U	0.035 U	0.013 J	0.037 U	0.037 U	0.041 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.061 J	0.037 U	0.036 U	0.035 U	0.123 J	0.037 U	0.037 U	0.041 U

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-01 8 - 10 08/29/01 BMWW8-01-S(8-10)	MWW8-01 10 - 12 08/29/01 BMWW8-01-S(10-12)	MWW8-02 0.5 - 2 08/29/01 BMWW8-02-S(0-2)	MWW8-02 6 - 8 08/29/01 BMWW8-02-S(6-8)	MWW8-02 8 - 10 08/29/01 BMWW8-02-S(8-10)	MWW8-02 12 - 14 08/29/01 BMWW8-02-S(12-14)	MWW8-03 2 - 4 09/04/01 BMWW8-03-S(2-4)	MWW8-03 8 - 10 09/04/01 BMWW8-03-S(8-10)	MWW8-03 24 - 26 09/04/01 BMWW8-03-S(24-26)	MWW8-04 2 - 4 09/04/01 BMWW8-04-S(2-4)-N
Detected PCBs																				
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.036 U	0.039 U	0.04 U	0.038 U	0.039 U	0.035 U	0.039 U	0.037 U	0.021 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.036 U	0.039 U	0.28	0.082	0.23	0.035 U	0.039 U	0.037 U	0.0055 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.036 U	0.039 U	0.04 U	0.038 U	0.039 U	0.035 U	0.039 U	0.037 U	0.024 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.036 U	0.039 U	0.04 U	0.038 U	0.039 U	0.024 J	0.052	0.037 U	0.0088 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.039 U	0.036 U	0.039 U	0.28	0.082	0.23	0.024 J	0.052	0.037 U	0.024 U

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-04 8 - 10 09/04/01 BMWW8-04-S(8-10)	MWW8-04 10 - 12 09/04/01 BMWW8-04-S(10-12)	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)	MWW8-05 8 - 10 08/20/01 BMWW8-05-S(8-10)	MWW8-09 0.9 - 2 01/28/02 BMWW8-09-S(0-2)	MWW8-09 8 - 10 01/28/02 BMWW8-09-S(8-10)	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)	MWW8-10 12 - 14 01/29/02 BMWW8-10-S(12-14)	MWW8-11 0.8 - 2 02/04/02 BMWW8-11-0-2	MWW8-11 8 - 10 02/04/02 BMWW8-11-8-10
Detected PCBs																				
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.036 U	0.041 U	0.036 U	0.038 U	0.037 U	0.039 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.34	0.036 U	0.013 J	0.036 U	0.049	0.037 U	0.039 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.027 J	0.041 U	0.036 U	0.038 U	0.037 U	0.039 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.27	0.036 U	0.013 J	0.036 U	0.038 U	0.037 U	0.039 U	0.038 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.038 U	0.61	0.027 J	0.026 J	0.036 U	0.049	0.037 U	0.039 U	0.038 U

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-12 1 - 3 02/06/02 BMWW8-12-1-3	MWW8-12 8 - 10 02/06/02 BMWW8-12-8-10	MWW8-13 0.7 - 2 05/29/03 MWW813S(0-2)	MWW8-13 8 - 10 05/29/03 MWW813S(8-10)DL	MWW8-13 15 - 17 05/29/03 MWW813S(15-17)	MWW8-29 0.6 - 2 11/11/04 MWW8-29-S(0-2)-111104	MWW8-29 8 - 10 11/11/04 MWW8-29-S(8-10)-111104	MWW8-29 11 - 13 11/11/04 MWW8-29-S(11-13)-111104
Detected PCBs																		
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.039 U [0.039 U]	0.036 U	0.077 U	0.04 U	0.035 U	0.039 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.046 [0.029 J]	0.036	0.88	0.04 U	0.035 U	0.039 U	0.35
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.039 U [0.039 U]	0.036 U	0.077 U	0.04 U	0.035 U	0.039 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.039 U [0.039 U]	0.036 U	0.077 U	0.04 U	0.035 U	0.039 U	0.058
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	0.037 U	0.046 [0.029 J]	0.036	0.88	0.04 U	0.035 U	0.039 U	0.408

See Notes on last page.

Table 4-26 W-08 PCB Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
R	Rejected data
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-20 2 - 4 08/10/04 BCC-20B-S(2-4)081004DL	BCC-20 6.5 - 8 08/10/04 BCC-20B-S(6.5-8)081004DL	BCC-20 13 - 13.5 08/10/04 BCC-20B-S(13-13.5)081004DL	BCC-21 0.5 - 1.5 06/02/04 BCC-21-S(0.5-1.5)	BCC-21-2 6 - 8 07/28/04 BCC212S6-8	BCC-21-2 6 - 8 07/28/04 BCC212S6-8DL	BCC-25 0.9 - 2 06/02/04 BCC-25-S(1-2)DL	BCC-73 0 - 2 06/03/04 BCC-73-S(0-2)	BCC-73 5 - 7 06/03/04 BCC-73-S(5-7)
Detected Volatile Organics																			
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.022 U	0.022 U	0.024 U	NA	NA	0.0081 J	NA	NA	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.00026 J	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.0097 UJ	0.0092 UJ	0.0097 UJ	NA	NA	0.011 U	NA	NA	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0024 J	0.002 J	0.0016 J	NA	NA	0.022 UJ	NA	NA	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.0097 U	0.0092 U	0.0097 U	NA	NA	0.011 U	NA	NA	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0097 UJ	0.0092 UJ	0.0097 UJ	NA	NA	0.011 U	NA	NA	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.00074 J	0.00044 J	0.001 J	NA	NA	0.0013 J	NA	NA	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0097 UJ	0.0092 UJ	0.0097 UJ	NA	NA	0.011 U	NA	NA	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0097 UJ	0.0092 UJ	0.0097 UJ	NA	NA	0.011 U	NA	NA	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.019 U	0.018 U	0.019 U	NA	NA	0.022 UJ	NA	NA	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.0049 U	0.0046 U	0.00024 J	NA	NA	0.0055 U	NA	NA	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.0049 U	0.0046 U	0.0048 U	NA	NA	0.0055 U	NA	NA	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.0049 U	0.00039 J	0.00054 J	NA	NA	0.00075 J	NA	NA	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.0097 U	0.0092 U	0.0097 U	NA	NA	0.011 U	NA	NA	NA
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.06 J	0.02 J [0.019 J]	NA	0.93 J	0.38 U [0.37 U]	0.41 U
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.94 U	NA	NA	0.24 J	0.026 J [0.02 J]	NA	1.3 J	0.38 U [0.37 U]	0.41 U
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.02 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	0.94 U	NA	NA	0.018 J	0.4 U [0.39 U]	NA	1.2 J	0.38 U [0.37 U]	0.41 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	0.94 U	NA	NA	0.055 J	0.4 U [0.39 U]	NA	2.7 J	0.38 U [0.37 U]	0.41 U
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.048 J	0.4 UJ [0.39 UJ]	NA	R	0.38 U [0.37 U]	0.41 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.13 J	0.4 U [0.39 U]	NA	2.7 J	0.38 U [0.37 U]	0.41 U
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	0.94 U	NA	NA	0.087 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.16 J	0.4 U [0.39 U]	NA	R	0.019 J [0.37 U]	0.41 U
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	0.94 U	NA	NA	0.088 J	0.4 U [0.39 U]	NA	1.5 J	0.38 U [0.37 U]	0.41 U
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.045 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.049 J	NA	NA	R	0.032 J [0.055 J]	NA	R	0.043 J [0.035 J]	0.41 U
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.94 U	NA	NA	R	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	0.94 U	NA	NA	0.015 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.17 J	0.4 U [0.39 U]	NA	2.4 J	0.38 U [0.37 U]	0.41 U
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.029 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	0.94 U	NA	NA	0.086 J	0.4 U [0.39 U]	NA	1 J	0.38 U [0.37 U]	0.41 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	0.046 J	NA	NA	0.028 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	0.94 U	NA	NA	0.22 J	0.4 U [0.39 U]	NA	11 J	0.017 J [0.37 U]	0.41 U
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	0.94 U	NA	NA	0.03 J	0.021 J [0.022 J]	NA	12 J	0.38 U [0.37 U]	0.41 U
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.94 U	NA	NA	0.058 J	0.4 U [0.39 U]	NA	1.2 J	0.38 U [0.37 U]	0.41 U
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.94 U	NA	NA	0.4 J	0.051 J [0.046 J]	NA	20 J	0.38 U [0.37 U]	0.41 U
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	0.94 U	NA	NA	R	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	0.94 U	NA	NA	0.17 J	0.4 U [0.39 U]	NA	7.5 J	0.017 J [0.37 U]	0.41 U
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.94 U	NA	NA	0.27 J	0.4 U [0.39 U]	NA	R	0.38 U [0.37 U]	0.41 U

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-74 0 - 2 06/03/04 BCC-74-S(0-2)DL	BCC-74 5 - 7 06/03/04 BCC-74-S(5-7)	BW8-01 2 - 4 09/05/01 BW8-01-S(2-4)	BW8-01 2 - 4 09/05/01 BW8-01-S(2-4)DL	BW8-01 8 - 10 09/05/01 BW8-01-S(8-10)	BW8-01 8 - 10 09/05/01 BW8-01-S(8-10)DL	BW8-01 10 - 12 09/06/01 BW8-01-S(10-12)	BW8-01 10 - 12 09/06/01 BW8-01-S(10-12)DL	BW8-02 0 - 2 09/05/01 BW8-02-S(0-2)	BW8-02 0 - 2 09/05/01 BW8-02-S(0-2)DL	BW8-02 8 - 10 09/05/01 BW8-02-S(8-10)
Detected Volatile Organics																					
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	NA	NA	NA	0.023 U	NA	0.023 U	NA	0.023 U	NA	0.026 U	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	NA	NA	NA	0.012 UJ	NA	0.012 UJ	NA	0.011 UJ	NA	0.013 UJ	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	NA	NA	NA	0.023 U	NA	0.023 U	NA	0.023 U	NA	0.026 U	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	NA	NA	NA	0.012 U	NA	0.012 U	NA	0.011 U	NA	0.013 U	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	0.012 U	NA	0.012 U	NA	0.011 U	NA	0.013 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	NA	NA	NA	0.0058 UJ	NA	0.0058 UJ	NA	0.0057 UJ	NA	0.0064 UJ	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	0.012 U	NA	0.012 U	NA	0.011 U	NA	0.013 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	NA	0.012 U	NA	0.012 U	NA	0.011 U	NA	0.013 U	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	NA	NA	NA	0.023 U	NA	0.023 U	NA	0.023 U	NA	0.026 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	NA	NA	NA	0.0026 J	NA	0.0014 J	NA	0.0027 J	NA	0.0021 J	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	NA	NA	NA	0.0058 U	NA	0.0058 U	NA	0.0057 U	NA	0.0064 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	NA	NA	NA	0.012 U	NA	0.012 U	NA	0.011 U	NA	0.013 U	NA
Detected Semivolatile Organics																					
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.32 J	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.073 J	NA	0.24 J
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.071 J	NA	0.19 J
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.095 J	NA	0.29 J
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.11 J
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.069 J
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.43 J	0.15 J	0.062 J	NA	0.11 J	NA	0.064 J	NA	0.36 U	NA	0.12 J
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.083 J	NA	0.26 J
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.11 J	NA	0.42
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.1 J
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.23 J
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.12 J	NA	0.48
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	7.6 U	0.39 U	0.37 U	NA	0.35 U	NA	0.39 U	NA	0.36 U	NA	0.38 U

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-02 8 - 10 09/05/01 BW8-02-S(8-10)DL	BW8-03 0.5 - 2 07/28/03 BW803S(0-2)DL	BW8-03 3 - 5 07/28/03 BW803S(3-5)DL	BW8-03 8 - 10 07/28/03 BW803S(8-10)	BW8-03 8 - 10 07/28/03 BW803S(8-10)DL	BW8-04 0 - 2 07/22/03 BW804S(0-2)	BW8-04 0 - 2 07/22/03 BW804S(0-2)DL	BW8-04 5 - 7 07/22/03 BW804S(5-7)	BW8-04 5 - 7 07/22/03 BW804S(5-7)DL	BW8-05 0.7 - 2 07/22/03 BW805S(0-2)	BW8-05 0.7 - 2 07/22/03 BW805S(0-2)DL	BW8-05 7 - 9 07/22/03 BW805S(7-9)
Detected Volatile Organics																						
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.021	0.029 J	0.047	NA	0.018 U	NA	0.021 U	NA	0.24 J	NA	0.0057 J	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.0041 J	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.01 UJ	0.009 U	0.012 U	NA	0.009 U	NA	0.01 U	NA	0.48 U	NA	0.0096 U	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0055 J	0.018 U	0.014 J	NA	0.018 U	NA	0.021 U	NA	0.96 U	NA	0.0022 J	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.00031 J	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.01 U	0.009 U	0.012 U	NA	0.009 U	NA	0.01 UJ	NA	0.48 U	NA	0.0096 UJ	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.013	0.009 U	0.012 U	NA	0.009 U	NA	0.01 U	NA	0.083 J	NA	0.0096 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0063	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0011 J	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.0051 U	0.0045 U	0.00068 J	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0051 UJ	0.0017 J	0.0061 U	NA	0.0023 J	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.013	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.13 J	NA	0.0048 U	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.0016 J	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	0.009 U	0.012 U	NA	0.009 U	NA	0.01 U	NA	0.11 J	NA	0.0096 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.023	0.009 U	0.012 U	NA	0.009 U	NA	0.01 U	NA	0.098 J	NA	0.0096 U	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.021 U	0.0031 J	0.0034 J	NA	0.018 U	NA	0.021 U	NA	0.96 U	NA	0.019 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	R	NA	0.0048 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.011	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.0051 U	0.0045 U	0.0061 U	NA	0.0045 U	NA	0.0051 U	NA	0.24 U	NA	0.0048 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.063	0.009 U	0.012 U	NA	0.009 U	NA	0.01 U	NA	0.77	NA	0.0096 U	NA
Detected Semivolatile Organics																						
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.034 J	NA	0.37 U	NA	0.37 U [0.37 U]
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	1.2 J	0.59 J	0.38 U	NA	0.35 U	NA	0.43	NA	0.37 U	NA	0.37 U [0.37 U]
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	0.63 J	7.8 U	0.38 U	NA	0.35 U	NA	0.04 J	NA	0.027 J	NA	0.37 U [0.37 U]
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	2.3 J	0.81 J	0.38 U	NA	0.35 U	NA	0.27 J	NA	0.022 J	NA	0.37 U [0.37 U]
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	1.3 J	7.8 U	0.38 UJ	NA	0.036 J	NA	0.28 J	NA	0.037 J	NA	0.37 U [0.37 U]
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.04 J	NA	0.21 J	NA	0.37 U	NA	0.37 U [0.37 U]
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.57 J	7.8 U	0.38 U	NA	0.051 J	NA	0.27 J	NA	0.031 J	NA	0.37 U [0.37 U]
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.032 J	NA	0.039 J	NA	0.37 U	NA	0.37 U [0.37 U]
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.027 J	NA	0.16 J	NA	0.37 U	NA	0.37 U [0.37 U]
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.025 J	NA	0.37 U	NA	0.37 U [0.37 U]
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	1 J	7.8 U	0.38 U	NA	0.35 U	NA	0.065 J	NA	0.37 U	NA	0.37 U [0.37 U]
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	1.4 J	7.8 U	0.38 UJ	NA	0.052 J	NA	0.37 J	NA	0.077 J	NA	0.37 U [0.37 U]
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	0.55 J	7.8 U	0.38 U	NA	0.35 U	NA	0.038 J	NA	0.031 J	NA	0.37 U [0.37 U]
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	4.3 J	1.4 J	0.38 U	NA	0.068 J	NA	0.81	NA	0.11 J	NA	0.37 U [0.37 U]
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	NA	2.7 J	0.98 J	0.38 U	NA	0.35 U	NA	0.057 J	NA	0.37 U	NA	0.37 U [0.37 U]
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	7.2 U	7.8 U	0.38 U	NA	0.027 J	NA	0.071 J	NA	0.37 U	NA	0.37 U [0.37 U]
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	NA	14	5 J	0.38 U	NA	0.025 J	NA	0.35 J	NA	0.17 J	NA	0.37 U [0.028 J]
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	7.2 U	7.8 U	0.38 U	NA	0.35 U	NA	0.38 U	NA	0.37 U	NA	0.37 U [0.37 U]
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	11	3.3 J	0.38 UJ	NA	0.08 J	NA	0.97	NA	0.081 J	NA	0.37 U [0.37 U]
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	0.66 J	7.8 U	0.38 U	NA	0.35 U	NA	0.13 J	NA	0.026 J	NA	0.37 U [0.37 U]

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-05 7 - 9 07/22/03 BW805S(7-9)DL	BW8-06 0.5 - 2 07/28/03 BW806S(0-2)DL	BW8-06 2 - 4 07/28/03 BW806S(2-4)DL	BW8-06 6 - 8 07/28/03 BW806S(6-8)	BW8-06 6 - 8 07/28/03 BW806S(6-8)DL	BW8-108 0 - 2 08/02/05 BW8-108-S(0-2)080205	BW8-108 0 - 2 08/02/05 BW8-108-S(0-2)080205DL	BW8-108 8 - 10 08/02/05 BW8-108-S(8-10)080205	BW8-108 8 - 10 08/02/05 BW8-108-S(8-10)080205DL
Detected Volatile Organics																			
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.0034 J	1.2 UJ	1.3 UJ	NA	0.02 U	5.2 J	NA	0.67 U	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.0043 U	0.3 U	0.057 J	NA	0.0014 J	0.045 U	NA	0.044 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.0087 U	0.61 U	0.64 U	NA	0.01 U	0.22 U	NA	0.22 U	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.017 U	1.2 U	1.3 U	NA	0.02 U	0.17 J	NA	0.67 U	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.22 U	NA	0.22 U	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.0087 U	0.61 U	0.64 U	NA	0.01 U	0.22 U	NA	0.22 U	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0087 U	0.61 U	0.039 J	NA	0.01 U	1.1 U	NA	1.1 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.09 U	NA	0.089 U	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.09 U	NA	0.089 U	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.045 U	NA	0.044 U	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.0043 U	0.3 U	0.32 U	NA	0.001 J	0.045 U	NA	0.044 U	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0015 J	0.3 U	0.075 J	NA	0.005 U	0.22 U	NA	0.22 U	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.0043 U	0.042 J	0.098 J	NA	0.0019 J	0.045 U	NA	0.048	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.0043 U	0.027 J	0.046 J	NA	0.005 U	0.22 U	NA	0.065 J	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0087 U	0.11 J	0.23 J	NA	0.01 U	1.1 U	NA	1.1 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0087 U	0.61 U	0.078 J	NA	0.01 U	0.0094 J	NA	0.044 J	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.017 U	1.2 U	1.3 U	NA	0.02 U	0.018 J	NA	2.2 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.045 U	NA	0.044 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.09 U	NA	0.089 U	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.045 U	NA	0.044 U	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.045 U	NA	0.05	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.0043 U	0.3 U	0.32 U	NA	0.005 U	0.045 U	NA	0.044 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.0087 U	0.34 J	0.48 J	NA	0.0012 J	0.13 U	NA	0.13 U	NA
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	1.1 J	NA	0.12 J
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	8.4	NA	1.2 J
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	20 U	0.47 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	20 U	0.77 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	3.9 J	0.023 J	NA	NA	7.4 U	NA	1.8 U
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	20 U	6.1 J	0.057 J	NA	NA	7.4 U	NA	1.8 U
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	6.9 J	0.062 J	NA	NA	7.4 U	NA	1.8 U
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	20 U	3.4 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	3.3 J	0.06 J	NA	NA	7.4 U	NA	1.8 U
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	2.3 J	5.9 J	0.035 J	NA	NA	7.4 U	NA	1.8 U
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	1 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	20 U	3.6 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	2 J	6.9 J	0.11 J	NA	NA	0.66 J	NA	1.8 U
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	NA	20 U	0.66 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	20 U	2.9 J	0.37 U	NA	NA	7.4 U	NA	1.8 U
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	NA	1.8 J	3.6 J	0.081 J	NA	NA	1.8 J	NA	1.8 U
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	20 U	7.4 U	0.37 U	NA	NA	7.4 U	NA	1.8 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	2.7 J	8.3	0.066 J	NA	NA	0.84 J	NA	1.8 U
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	20 U	7.4 U	0.028 J	NA	NA	2.5 J	NA	0.33 J

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW8-118 0 - 2 08/25/05 BW8-118R-S(0-2)082505	BW8-118 0 - 2 08/25/05 BW8-118R-S(0-2)082505DL	BW8-118 8 - 10 08/25/05 BW8-118R-S(8-10)082505	BW8-118 12 - 14 08/25/05 BW8-118R-S(12-14)082505	BW8-118 12 - 14 08/25/05 BW8-118R-S(12-14)082505DL	MWW8-01 0.7 - 2 08/29/01 BMWW8-01-S(0-2)	MWW8-01 0.7 - 2 08/29/01 BMWW8-01-S(0-2)DL	MWW8-01 8 - 10 08/29/01 BMWW8-01-S(8-10)
Detected Volatile Organics																		
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.69 U	NA	0.67 U	0.67 U	NA	NA	0.027 U	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.23 UJ	NA	0.22 UJ	0.22 UJ	NA	NA	0.013 U	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.69 U	NA	0.67 U	0.67 UJ	NA	NA	0.027 U	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.23 U	NA	0.22 U	0.22 UJ	NA	NA	0.0066 U	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.23 U	NA	0.22 U	0.01 J	NA	NA	0.013 U	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.1 U	NA	1.1 U	1.1 UJ	NA	NA	0.013 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.092 U	NA	0.09 U	0.089 UJ	NA	NA	0.0066 U	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.092 U	NA	0.09 U	0.089 UJ	NA	NA	0.0066 U	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.23 U	NA	0.22 U	0.22 UJ	NA	NA	0.0066 UJ	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.046 U	NA	0.045 U	0.019 J	NA	NA	0.0066 U	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.23 U	NA	0.22 U	0.012 J	NA	NA	0.0066 U	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.1 U	NA	1.1 U	1.1 UJ	NA	NA	0.013 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.1 U	NA	0.015 J	1.1 UJ	NA	NA	0.013 U	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	2.3 U	NA	2.2 U	2.2 UJ	NA	NA	0.027 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.092 U	NA	0.09 U	0.01 J	NA	NA	0.002 J	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.046 U	NA	0.045 U	0.045 UJ	NA	NA	0.0066 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.14 U	NA	0.13 U	0.069 J	NA	NA	0.013 U	NA
Detected Semivolatile Organics																		
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	1.9 U	0.37 U	NA	0.25 J	0.41 U	NA	0.39 U
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	1.9 U	0.079 J	NA	0.099 J	0.41 U	NA	0.39 U
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	0.19 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	0.18 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.29 J	0.37 UJ	NA	1.8 UJ	0.41 U	NA	0.39 U
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	0.18 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.28 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	0.13 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	1.9 U	0.37 U	NA	1.8 UJ	0.41 U	NA	0.063 J
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	1.9 UJ	0.37 UJ	NA	1.8 UJ	0.41 U	NA	0.39 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	0.34 J	0.37 UJ	NA	1.8 UJ	0.41 U	NA	0.39 U
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	0.71 J	0.37 U	NA	0.093 J	0.41 U	NA	0.39 U
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	NA	0.22 J	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.26 J	0.37 UJ	NA	1.8 UJ	0.41 U	NA	0.39 U
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	NA	0.51 J	0.048 J	NA	0.3 J	0.41 U	NA	0.39 U
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	1.9 U	0.37 U	NA	1.8 U	0.41 U	NA	0.39 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	0.82 J	0.37 UJ	NA	0.12 J	0.41 U	NA	0.39 U
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	1.9 U	0.028 J	NA	1.8 U	0.41 U	NA	0.39 U

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-01 8 - 10 08/29/01 BMWW8-01-S(8-10)DL	MWW8-01 10 - 12 08/29/01 BMWW8-01-S(10-12)DL	MWW8-01 10 - 12 08/29/01 BMWW8-01-S(10-12)R2	MWW8-02 0.5 - 2 08/29/01 BMWW8-02-S(0-2)DL	MWW8-02 6 - 8 08/29/01 BMWW8-02-S(6-8)DL	MWW8-02 8 - 10 08/29/01 BMWW8-02-S(8-10)	MWW8-02 8 - 10 08/29/01 BMWW8-02-S(8-10)DL	MWW8-02 12 - 14 08/29/01 BMWW8-02-S(12-14)DL
Detected Volatile Organics																		
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.021 U	0.03 U	NA	0.3 J	0.011 J	NA	0.0097 J	0.0095 J
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.0052 U	0.0075 U	NA	0.045 J	0.005 U	NA	0.0045 U	0.0046 U
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.01 U	0.015 U	NA	0.49 UJ	0.01 U	NA	0.0089 U	0.0093 U
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.021 U	0.03 U	NA	0.13 J	0.0035 J	NA	0.003 J	0.0025 J
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.01 U	0.015 U	NA	0.49 U	0.01 U	NA	0.0089 U	0.0093 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	0.015 U	NA	0.49 U	0.01 U	NA	0.0089 U	0.0093 U
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.0052 U	0.0075 U	NA	0.032 J	0.005 U	NA	0.0045 U	0.0046 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0052 UJ	0.0075 UJ	NA	0.24 U	0.005 UJ	NA	0.0045 UJ	0.0046 UJ
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.0052 U	0.0075 U	NA	0.076 J	0.005 U	NA	0.0045 U	0.0046 U
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0011 J	0.0046 U
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	0.015 U	NA	0.12 J	0.01 UJ	NA	0.0089 UJ	0.0093 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	0.015 U	NA	0.1 J	0.0014 J	NA	0.0012 J	0.0093 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.021 U	0.03 U	NA	0.97 U	0.02 U	NA	0.018 U	0.019 U
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.001 J	0.0016 J	NA	0.24 U	0.00092 J	NA	0.0011 J	0.0018 J
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.0052 U	0.0075 U	NA	0.24 U	0.005 U	NA	0.0045 U	0.0046 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.01 U	0.015 U	NA	0.41 J	0.01 U	NA	0.0089 U	0.0093 U
Detected Semivolatile Organics																		
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	NA	0.36 U	20 U	0.3 J	0.066 J	NA	0.32 J
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	0.45 J	0.095 J	NA	0.9 J
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	0.76 J
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	0.49 J	0.089 J	NA	0.99 J
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	0.48 J
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	0.4 J
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	NA	0.14 J	20 U	2 U	0.071 J	NA	1.9 U
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	0.54 J	0.086 J	NA	1 J
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	NA	0.36 U	3.6 J	1.1 J	0.2 J	NA	1.6 J
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	NA	NA	0.36 U	20 U	0.41 J	0.1 J	NA	0.41 J
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	0.46 J
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	NA	NA	0.36 U	7.7 J	1.3 J	0.17 J	NA	0.84 J
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	NA	0.36 U	20 U	1 J	0.22 J	NA	1.7 J
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	NA	0.36 U	20 U	2 U	0.38 U	NA	1.9 U

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-03 2 - 4 09/04/01 BMWW8-03-S(2-4)DL	MWW8-03 8 - 10 09/04/01 BMWW8-03-S(8-10)DL	MWW8-03 24 - 26 09/04/01 BMWW8-03-S(24-26)	MWW8-03 24 - 26 09/04/01 BMWW8-03-S(24-26)DL	MWW8-04 2 - 4 09/04/01 BMWW8-04-S(2-4)-N	MWW8-04 8 - 10 09/04/01 BMWW8-04-S(8-10)	MWW8-04 8 - 10 09/04/01 BMWW8-04-S(8-10)DL	MWW8-04 10 - 12 09/04/01 BMWW8-04-S(10-12)	MWW8-04 10 - 12 09/04/01 BMWW8-04-S(10-12)DL
Detected Volatile Organics																			
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.031 J	0.13 J	NA	0.017 U	0.0024 U	NA	0.014 J	NA	0.87 U
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.00084 J	0.3 U	NA	0.0043 U	0.00073 U	NA	0.0053 U	NA	0.22 U
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.01 UJ	0.6 UJ	NA	0.0086 U	0.002 U	NA	0.011 U	NA	0.43 U
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0036 J	1.2 U	NA	0.017 U	0.003 U	NA	0.0029 J	NA	0.87 U
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.0016 J	0.3 U	NA	0.0043 U	0.00088 U	NA	0.0053 U	NA	0.22 U
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.01 U	0.6 U	NA	0.0086 U	0.0015 U	NA	0.011 U	NA	0.43 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0013 J	0.6 U	NA	0.0086 U	0.0011 U	NA	0.011 U	NA	0.43 U
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.005 U	0.3 U	NA	0.0043 U	0.0008 U	NA	0.0053 U	NA	0.22 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.00076 J	0.3 U	NA	0.0043 U	0.00075 U	NA	0.0053 U	NA	0.22 U
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.0011 J	0.3 U	NA	0.0043 U	0.00065 U	NA	0.0053 U	NA	0.22 U
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.005 U	0.3 U	NA	0.0043 U	0.0013 U	NA	0.0053 U	NA	0.22 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.005 UJ	0.3 UJ	NA	0.0043 UJ	0.0015 UJ	NA	0.0053 UJ	NA	0.22 UJ
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.00068 J	0.028 J	NA	0.0043 U	0.00066 U	NA	0.0053 U	NA	0.22 U
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.005 U	0.022 J	NA	0.0043 U	0.00079 U	NA	0.013	NA	0.22 U
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0014 J	0.6 U	NA	0.0086 U	0.0012 U	NA	0.011 U	NA	0.43 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0019 J	0.6 U	NA	0.0007 J	0.00066 U	NA	0.011 U	NA	0.43 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.0024 J	1.2 U	NA	0.017 U	0.0021 U	NA	0.021 U	NA	0.87 U
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.005 U	0.3 U	NA	0.0043 U	0.00056 U	NA	0.0053 U	NA	0.22 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.0037 J	0.056 J	NA	0.0043 U	0.0016 J	NA	0.0021 J	NA	0.22 U
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.005 U	0.3 U	NA	0.0043 U	0.001 U	NA	0.0053 U	NA	0.22 U
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	0.005 U	0.3 U	NA	0.0043 U	0.0013 U	NA	0.0053 U	NA	0.22 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.005 U	0.3 U	NA	0.0043 U	0.00085 U	NA	0.0053 U	NA	0.22 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.0019 J	0.11 J	NA	0.0086 U	0.0021 U	NA	0.011 U	NA	0.43 U
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.17 U	0.38 U	NA	0.38 U	NA
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	17 U	6.7 J	0.37 U	NA	0.057 U	0.38 U	NA	0.38 U	NA
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.056 U	0.38 U	NA	0.38 U	NA
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	17 U	19 U	0.37 U	NA	0.061 U	0.38 U	NA	0.38 U	NA
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	3.5 J	19 U	0.37 U	NA	0.058 U	0.38 U	NA	0.38 U	NA
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.2 U	0.38 U	NA	0.38 U	NA
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.066 U	0.38 U	NA	0.38 U	NA
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	17 U	19 U	0.37 U	NA	0.072 U	0.38 U	NA	0.38 U	NA
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.069 U	0.38 U	NA	0.38 U	NA
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	17 U	19 U	0.37 U	NA	0.066 U	0.38 U	NA	0.38 U	NA
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.063 U	0.38 U	NA	0.38 U	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	17 U	19 U	0.37 U	NA	0.064 U	0.18 J	NA	0.081 J	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	17 U	19 U	0.37 U	NA	0.061 U	0.38 U	NA	0.38 U	NA
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	17 U	19 U	0.37 U	NA	0.062 U	0.38 U	NA	0.38 U	NA
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.055 U	0.38 U	NA	0.38 U	NA
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.061 U	0.38 U	NA	0.38 U	NA
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	17 U	19 U	0.37 U	NA	0.06 U	0.38 U	NA	0.38 U	NA
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	17 U	19 U	0.37 U	NA	0.18 U	0.38 U	NA	0.38 U	NA
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	17 U	19 U	0.37 U	NA	0.067 U	0.084 J	NA	0.38 U	NA
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	19	21	0.37 U	NA	0.057 U	0.38 U	NA	0.38 U	NA
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	17 U	19 U	0.37 U	NA	0.084 U	0.38 U	NA	0.38 U	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	18	42	0.31 J	NA	0.062 U	0.09 J	NA	0.38 U	NA
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	17 U	19 U	0.37 U	NA	0.058 U	0.38 U	NA	0.38 U	NA
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	17 U	4.1 J	0.37 U	NA	0.061 U	0.067 J	NA	0.38 U	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	17 U	19 U	0.37 U	NA	0.058 U	0.38 U	NA	0.38 U	NA

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)	MWW8-05 0 - 2 08/20/01 BMWW8-05-S(0-2)DL	MWW8-05 8 - 10 08/20/01 BMWW8-05-S(8-10)	MWW8-05 8 - 10 08/20/01 BMWW8-05-S(8-10)DL	MWW8-09 0.9 - 2 01/28/02 BMWW8-09-S(0-2)	MWW8-09 0.9 - 2 01/28/02 BMWW8-09-S(0-2)DL	MWW8-09 8 - 10 01/28/02 BMWW8-09-S(8-10)	MWW8-09 8 - 10 01/28/02 BMWW8-09-S(8-10)DL	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)
Detected Volatile Organics																			
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	NA	0.02 U	NA	0.0071 J	NA	0.056 J	NA	0.017 U	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	NA	0.02 U	NA	0.022 U	NA	0.0089 J	NA	0.017 U	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	NA	0.0049 UJ	NA	0.0056 UJ	NA	0.0063 U	NA	0.0044 U	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	NA	0.02 U	NA	0.022 U	NA	0.025 U	NA	0.017 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	NA	0.00073 J	NA	0.0023 J	NA	0.0018 J	NA	0.0044 U	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	NA	0.0049 U	NA	0.0056 U	NA	0.0063 U	NA	0.0044 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	NA	0.0098 U	NA	0.011 U	NA	0.013 U	NA	0.0087 U	NA
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.24 J
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.061 J	NA	0.36 U	NA	0.19 J	NA	0.36 U	NA	0.7
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	0.37 U	NA	0.36 U	NA	0.27 J	NA	0.36 U	NA	0.38 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	0.37 U	NA	0.36 U	NA	0.25 J	NA	0.36 U	NA	0.6
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.11 J	NA	0.36 U	NA	0.18 J	NA	0.36 U	NA	0.21 J
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	0.13 J	NA	0.36 U	NA	0.092 J	NA	0.36 U	NA	0.38 U
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.22 J	NA	0.36 U	NA	0.14 J	NA	0.36 U	NA	0.38 U
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	0.14 J	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	0.1 J	NA	0.36 U	NA	0.067 J	NA	0.36 U	NA	0.38 U
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.097 J	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.35 J
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.77	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	0.16 J	NA	0.36 U	NA	0.16 J	NA	0.36 U	NA	0.19 J
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	0.26 J	NA	0.36 U	NA	0.65	NA	0.36 U	NA	0.092 J
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	0.37 U	NA	0.36 U	NA	0.63	NA	0.36 U	NA	0.39
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.12 J	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.11 J	NA	0.36 U	NA	2.1	NA	0.36 U	NA	NA
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	0.37 U	NA	0.36 U	NA	0.41 U	NA	0.36 U	NA	0.38 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	0.22 J	NA	0.36 U	NA	0.63	NA	0.36 U	NA	0.13 J
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.37 U	NA	0.36 U	NA	0.14 J	NA	0.36 U	NA	0.12 J

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)DL	MWW8-10 2 - 4 01/29/02 BMWW8-10-S(2-4)DLR2	MWW8-10 12 - 14 01/29/02 BMWW8-10-S(12-14)	MWW8-10 12 - 14 01/29/02 BMWW8-10-S(12-14)DL	MWW8-11 0.8 - 2 02/04/02 BMWW8-11-0-2	MWW8-11 0.8 - 2 02/04/02 BMWW8-11-0-2DL	MWW8-11 0.8 - 2 02/04/02 BMWW8-11-0-2DLR2	MWW8-11 8 - 10 02/04/02 BMWW8-11-8-10	MWW8-11 8 - 10 02/04/02 BMWW8-11-8-10DL
Detected Volatile Organics																			
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.02 U	NA	NA	0.021 U	NA	0.011 J	NA	NA	0.012 J
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	0.01 U	NA	NA	0.01 UJ	NA	0.01 U	NA	NA	0.0098 U
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0038 J	NA	NA	0.0034 J	NA	0.02 U	NA	NA	0.02 U
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.005 U	NA	NA	0.0052 U	NA	0.0016 J	NA	NA	0.0049 U
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	0.01 U	NA	NA	0.01 U	NA	0.01 U	NA	NA	0.0098 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	NA	NA	0.01 U	NA	0.01 U	NA	NA	0.0098 U
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.0033 J	NA	NA	0.00072 J	NA	0.005 U	NA	NA	0.00081 J
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.00086 J
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.01 U	NA	NA	0.01 U	NA	0.01 U	NA	NA	0.0098 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0013 J	NA	NA	0.01 U	NA	0.01 U	NA	NA	0.0098 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.0025 J	NA	NA	0.021 U	NA	0.02 U	NA	NA	0.02 U
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.0038 J	NA	NA	0.00097 J	NA	0.0011 J	NA	NA	0.00078 J
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	R	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	R	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.005 U	NA	NA	0.0052 U	NA	0.005 U	NA	NA	0.0049 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.01	NA	NA	0.0025 J	NA	0.01 U	NA	NA	0.0021 J
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.17 J	NA
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	NA	0.37 U	NA	0.39	NA	NA	0.44	NA
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.38 U	NA
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	NA	0.37 U	NA	0.69	NA	NA	0.58	NA
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	NA	0.37 U	NA	0.55	NA	NA	1.3	NA
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.38 U	NA
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.67	NA	NA	0.3 J	NA
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	NA	0.37 U	NA	0.47	NA	NA	0.38 U	NA
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.7	NA	NA	0.38 U	NA
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	NA	0.37 U	NA	0.19 J	NA	NA	0.38 U	NA
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.48	NA	NA	0.38 U	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	NA	1.8	NA	0.39 U	NA	NA	0.38 U	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.38 U	NA
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	NA	0.37 U	NA	0.09 J	NA	NA	0.38 U	NA
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.84	NA	NA	0.38	NA
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.38 U	NA
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	NA	0.37 U	NA	0.61	NA	NA	0.48	NA
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	NA	0.37 U	NA	0.39 U	NA	NA	0.38 U	NA
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	NA	0.37 U	NA	3.9	NA	NA	1.9	NA
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	NA	NA	0.37 U	NA	0.89	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.37 U	NA	0.19 J	NA	NA	0.38 U	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	NA	8.3	0.12 J	NA	NA	NA	4.7	NA	NA
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	NA	0.37 U	NA	0.11 J	NA	NA	0.38 U	NA
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	NA	0.37 U	NA	2	NA	NA	1	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	NA	0.37 U	NA	0.27 J	NA	NA	0.19 J	NA

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-11 8 - 10 02/04/02 BMWW8-11-8-10DLR2	MWW8-12 1 - 3 02/06/02 BMWW8-12-1-3	MWW8-12 1 - 3 02/06/02 BMWW8-12-1-3DL	MWW8-12 8 - 10 02/06/02 BMWW8-12-8-10	MWW8-12 8 - 10 02/06/02 BMWW8-12-8-10DL	MWW8-13 0.7 - 2 05/29/03 MWW813S(0-2)	MWW8-13 0.7 - 2 05/29/03 MWW813S(0-2)DL	MWW8-13 8 - 10 05/29/03 MWW813S(8-10)DL	MWW8-13 15 - 17 05/29/03 MWW813S(15-17)	MWW8-13 15 - 17 05/29/03 MWW813S(15-17)DL
Detected Volatile Organics																				
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	NA	NA	0.03 J	NA	0.97 U [0.32 J]	NA	0.0073 J	0.12 J	NA	0.0097 J
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	NA	NA	0.01 U	NA	0.48 U [0.54 U]	NA	0.012 U	0.5 U	NA	0.01 UJ
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	NA	NA	0.0046 J	NA	0.97 U [1.1 U]	NA	0.024 U	1 U	NA	0.0024 J
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	NA	NA	0.01 U	NA	0.48 U [0.54 U]	NA	0.012 U	0.5 U	NA	0.01 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.01 U	NA	0.48 U [0.54 U]	NA	0.012 U	0.5 U	NA	0.01 U
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	NA	NA	0.005 U	NA	0.021 J [0.018 J]	NA	0.0059 U	0.25 U	NA	0.0051 U
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.018 J	NA	0.0051 U
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.01 U	NA	0.48 U [0.54 U]	NA	0.012 U	0.04 J	NA	0.01 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	NA	0.01 U	NA	0.48 U [0.54 U]	NA	0.012 U	0.025 J	NA	0.01 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	NA	NA	0.02 U	NA	0.97 U [1.1 U]	NA	0.024 U	1 U	NA	0.02 U
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	NA	NA	0.0013 J	NA	0.0098 J [0.011 J]	NA	0.0059 U	0.015 J	NA	0.0051 U
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	NA	NA	0.005 U	NA	0.24 U [0.27 U]	NA	0.0059 U	0.25 U	NA	0.0051 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	NA	NA	0.01 U	NA	0.023 J [0.54 U]	NA	0.012 U	0.11 J	NA	0.01 U
Detected Semivolatile Organics																				
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	NA	0.37 U	NA	0.51 [0.43]	NA	0.025 J	NA	0.44 J	0.4 U	NA
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	NA	0.43	NA	0.31 J [0.33 J]	NA	0.032 J	NA	3.9 U	0.4 U	NA
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.1 J [0.095 J]	NA	0.11 J	NA	3.9 U	0.4 U	NA
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.081 J	NA	3.9 U	0.4 U	NA
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.077 J [0.39 U]	NA	0.13 J	NA	3.9 U	0.4 U	NA
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.062 J	NA	3.9 U	0.4 U	NA
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.067 J	NA	3.9 U	0.4 U	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	NA	0.061 J	NA	0.098 J [0.092 J]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.093 J [0.094 J]	NA	0.14 J	NA	3.9 U	0.4 U	NA
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.057 J	NA	3.9 U	0.4 U	NA
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	NA	0.18 J	NA	0.23 J [0.2 J]	NA	0.29 J	NA	3.9 U	0.4 U	NA
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	7.3	3.2	NA	1.6 [2]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.055 J	NA	3.9 U	0.4 U	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	9.9	3.5	NA	3.4 [3.2]	NA	0.27 J	NA	0.56 J	0.4 U	NA
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	NA	0.37 U	NA	0.39 U [0.39 U]	NA	0.36 U	NA	3.9 U	0.4 U	NA
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	NA	0.11 J	NA	0.67 [0.56]	NA	0.18 J	NA	3.9 U	0.4 U	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	NA	0.37 U	NA	0.064 J [0.066 J]	NA	0.024 J	NA	3.9 U	0.4 U	NA

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	MWW8-29 0.6 - 2 11/11/04 MWW8-29-S(0-2)-111104	MWW8-29 0.6 - 2 11/11/04 MWW8-29-S(0-2)-111104DL	MWW8-29 8 - 10 11/11/04 MWW8-29-S(8-10)-111104	MWW8-29 8 - 10 11/11/04 MWW8-29-S(8-10)-111104DL	MWW8-29 11 - 13 11/11/04 MWW8-29-S(11-13)-111104DL	MWW8-29 11 - 13 11/11/04 MWW8-29-S(11-13)-111104DLR2
Detected Volatile Organics																
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	NA	0.022 U	NA	0.021 U	0.97 U	NA
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	NA	0.00042 J	NA	0.00029 J	0.24 U	NA
Bromomethane	- -	- -	1,000	0.2	0.58	0.1	13	150,000	**1.6**	2,200	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	NA	0.0034 J	NA	0.021 U	0.97 U	NA
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
Chloromethane	- -	- -	7,400	5.2	22	- -	120	2,600,000	**10**	1,100	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.011 U	NA	0.01 U	0.48 U	NA
1,2-Dichlorobenzene	- -	- -	63,000	14	14	0.28	46,000	44,000,000	**20,000**	210	NA	0.0055 UJ	NA	0.0051 U	0.24 U	NA
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	NA	0.0055 UJ	NA	0.0051 U	0.24 U	NA
1,1-Dichloroethane	- -	- -	87,000	18	50	15	2,500	15,000,000	**430**	890	NA	0.02	NA	0.00088 J	0.49	NA
1,1-Dichloroethene	- -	- -	660	0.14	0.14	2.6	3.7	78,000	**0.33**	570	NA	0.0011 J	NA	0.0051 U	0.072 J	NA
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	NA	0.0014 J	NA	0.0019 J	0.24 U	NA
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	NA	0.00093 J	NA	0.0051 U	0.13 J	NA
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	NA	0.0055 U	NA	0.0051 U	0.13 J	NA
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.011 U	NA	0.01 U	0.14 J	NA
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	NA	0.011 U	NA	0.01 U	0.029 J	NA
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	NA	0.022 U	NA	0.021 U	0.97 U	NA
Styrene	- -	- -	1,900	2.7	2.7	2.1	3,300	6,900,000	**1,300**	520	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	NA	0.00066 J	NA	0.0003 J	0.24 U	NA
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	NA	0.014	NA	0.0051 U	0.93	NA
1,1,2-Trichloroethane	- -	- -	840	0.1	0.1	6.6	57	250,000	**24**	920	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	NA	0.0055 U	NA	0.0051 U	0.24 U	NA
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	NA	0.0012 J	NA	0.01 U	0.71	NA
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.13 J	NA	0.39 U	NA	6	NA
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.56	NA	0.39 U	NA	9.9	NA
4-Methylphenol	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.034 J	NA	0.39 U	NA	3.8 UJ	NA
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	0.093 J	NA	0.39 U	NA	3.8 UJ	NA
Benzaldehyde	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.019 J	NA	0.39 U	NA	3.8 UJ	NA
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.12 J	NA	0.39 U	NA	0.27 J	NA
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	0.066 J	NA	0.39 U	NA	3.8 UJ	NA
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Carbazole	- -	- -	2,400	9.4	39	1.1	- -	78,000	**- -**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	0.14 J	NA	0.39 U	NA	0.33 J	NA
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	0.092 J	NA	0.39 U	NA	3.8 UJ	NA
Di-n-Butylphthalate	- -	- -	87,000	960	2,700	11	- -	1,500,000	**- -**	760	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	0.17 J	NA	0.39 U	NA	1.7 J	NA
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	0.15 J	NA	0.39 U	NA	14	NA
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.04 J	NA	0.39 U	NA	3.8 UJ	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.61	NA	0.39 U	NA	NA	27
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	0.35 U	NA	0.39 U	NA	3.8 UJ	NA
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	0.18 J	NA	0.39 U	NA	1.7 J	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.39	NA	0.39 U	NA	1.9 J	NA

See Notes on last page.

Table 4-26 W-08 VOC-SVOC
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
Inf Source	Infinite Source Volatile Soil Inhalation Criteria
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-51 0.7 - 2 06/03/04 BCC-51-S(1-2)	BCC-51 0.7 - 2 06/03/04 BCC-51-S(1-2)DL	BCC-51 6 - 8 06/03/04 BCC-51-S(6-8)	BCC-51-1 0 - 2 08/06/04 BCC-51-1-S(0-2)080604	BCC-51-1 7.33 - 8 08/06/04 BCC-51-1-S(7.33-8)080604	BCC-51-1 8 - 10 08/06/04 BCC-51-1-S(8-10)080604	BCC-51-2 0 - 2 08/06/04 BCC-51-2-S(0-2)080604DL	BCC-51-2 7 - 8 08/06/04 BCC-51-2-S(7-8)080604	BCC-51-2 8 - 10 08/06/04 BCC-51-2-S(8-10)080604
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	1.28 J	R	NA	NA	NA	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	8.15 J	4.92 J	NA	NA	NA	NA	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	359 J	NA	9.15 J	NA	NA	NA	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	R	NA	R	NA	NA	NA	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	2.51 J	0.291 J	NA	NA	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	131 J	4.65 J	NA	NA	NA	NA	NA	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	12.1 J	NA	2.62 J	NA	NA	NA	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	161 J	NA	8.79 J	NA	NA	NA	NA	NA	NA
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	88.7 J	5.11 J	NA	NA	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	*4,510 J*	200 J	362	155	308	684	210	122
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.188	NA	0.0348 U	NA	NA	NA	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	157 J	NA	7.39 J	NA	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	3.01 U	0.527 U	NA	NA	NA	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	0.313 J	0.527 U	NA	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	6.03 UJ	1.06 U	NA	NA	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	20.7 J	7.7 J	NA	NA	NA	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	155 J	41.6 J	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-51-3 0 - 2 08/06/04 BCC-51-3-S(0-2)080604	BCC-51-3 5 - 6 08/06/04 BCC-51-3-S(5-6)080604	BCC-51-4 0 - 2 08/06/04 BCC-51-4-S(0-2)080604DL	BCC-51-4 7.8 - 8 08/06/04 BCC-51-4-S(7.8-8)080604	BCC-51-4 8 - 10 08/06/04 BCC-51-4-S(8-10)080604	BCC-52 0 - 2 06/03/04 BCC-52-S(0-2)	BCC-52 6 - 8 06/03/04 BCC-52-S(6-8)	BCC-53 0 - 2 06/03/04 BCC-53-S(0-2)	BCC-53 6 - 8 06/03/04 BCC-53-S(6-8)	BCC-53 6 - 8 06/03/04 BCC-53-S(6-8)DL
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	0.158 J	R	R	NA	1.89 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	NA	NA	NA	NA	4.97 J	4.63 J	4.82 J	NA	13.3 J
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	NA	NA	NA	NA	35.6 J	28.8 J	24.5 J	NA	90 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	NA	NA	NA	NA	0.114 U	R	R	R	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	NA	NA	NA	NA	0.539 J	0.523 J	0.557 J	NA	5.86 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	10.7 J	9.16 J	11.1 J	NA	136 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	5.37 J	4.78 J	4.12 J	8.88 J	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	12.9 J	14.4 J	15.5 J	180 J	NA
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	NA	NA	NA	NA	10.3 J	10.6 J	18.6 J	NA	221 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	244	378	683	251	190	360 J	236 J	232 J	NA	*1,800 J*
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	NA	NA	0.017 J	0.0058 J	0.0143 J	1.42	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	NA	NA	NA	NA	12.5 J	12.3 J	11.5 J	60.2 J	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	0.569 U	0.556 U	0.544 U	NA	2.93 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	NA	NA	NA	NA	0.569 U	0.556 U	0.544 U	0.898	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	NA	NA	NA	NA	1.33 U	1.11 U	1.09 U	NA	5.87 UJ
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	NA	NA	NA	NA	15.5 J	12.9 J	13 J	NA	16.4 J
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	NA	NA	NA	NA	49.6 J	52.7 J	92 J	NA	4,870 J

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-54 0 - 2 06/03/04 BCC-54-S(0-2)	BCC-54 6 - 8 06/03/04 BCC-54-S(6-8)	BCC-55 0 - 2 06/03/04 BCC-55-S(0-2)	BCC-55 6 - 8 06/03/04 BCC-55-S(6-8)	BCC-58 0.6 - 2 06/03/04 BCC-58-S(1-2)	BCC-58 6 - 8 06/03/04 BCC-58-S(6-8)	BCC-58 6 - 8 06/03/04 BCC-58-S(6-8)DL	BCC-58 10 - 12 07/29/04 BCC58BS10-12	BCC-58-1 0.75 - 2.75 07/29/04 BCC581S0.75-2.75	BCC-58-1 6 - 8 07/29/04 BCC581S6-8	BCC-58-1 10 - 12 07/29/04 BCC581S10-12	BCC-58-2 0.5 - 2.5 07/29/04 BCC582S0.5-2.5	BCC-58-2 6 - 8 07/29/04 BCC582S6-8
Detected Inorganics																								
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.114 J [R]	0.134 J	R	R	0.355 J	4.62 J	NA	0.164 J	0.417 J	0.354 J	0.384 J	2.23 UJ	0.162 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	6.49 J [3.58 J]	4.93 J	4.79 J	4.29 J	5.91 J	9.58 J	NA	2.47 J	3.49 J	4.11 J	7.27 J	2.34 J	3.24 J
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	48 J [42.4 J]	32.3 J	40.2 J	35.9 J	24.8 J	86.1 J	NA	21.5	18.1	31.7	36.4	6.52	10.7
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.111 U [0.403 J]	0.109 U	0.111 U	R	R	R	NA	0.217	0.152	0.289	0.55	0.0762 J	0.139
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.605 J [0.193 J]	0.78 J	0.567 J	0.436 J	0.864 J	0.602 J	NA	0.113 J	0.39 J	0.404 J	0.263 J	0.147 J	0.152 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	11.5 J [13.7 J]	10.2 J	11.4 J	11.5 J	22.4 J	51.8 J	NA	8.3 J	18.9 J	21.4 J	18.1 J	4.01 J	5.85 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	5.79 J [5.41 J]	3.83 J	4.56 J	4.64 J	4.2 J	3.63 J	NA	4.61	3.35	7.1	6.18	1.95	2.67
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	32.7 J [23.5 J]	22 J	15 J	13.9 J	35.3 J	17.8 J	NA	6.05 J	36.3 J	23.5 J	22.3 J	6.59 J	8.02 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	22.4 J [16.4 J]	29.9 J	19.4 J	11.3 J	32.9 J	394 J	NA	5.1 J	13.6 J	36.6 J	9.54 J	3.14 J	4.02 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	267 J [232 J]	287 J	253 J	266 J	405 J	NA	*2,710 J*	252	454	675	152	125	158
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.214 [0.0537]	0.0314 J	0.0321 J	0.0164 J	0.0083 J	0.0898	NA	0.0143 J	0.056	0.0542	0.0351 J	0.0367 U	0.0091 J
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	16.7 J [14.8 J]	11.8 J	12.2 J	12.5 J	18.1 J	15.3 J	NA	7	12.4	21.6	15.5	4.06	5.69
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.557 U [0.56 U]	0.547 U	0.554 U	0.579 U	0.543 U	NA	1.09 U	0.572 U	0.536 U	0.551 U	0.328 J	0.557 U	0.545 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.557 U [0.56 U]	0.547 U	0.554 U	0.579 U	0.0966 J	NA	1.09 U	0.572 U	0.536 U	0.0702 J	0.593 U	0.557 U	0.545 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.11 U [1.12 UJ]	1.09 U	1.16 U	1.16 U	1.09 U	NA	2.19 UJ	1.14 U	1.07 U	1.1 U	0.449 J	1.11 U	1.09 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	15.5 J [16.1 J]	12 J	13.5 J	14.4 J	12.1 J	14.8 J	NA	13.2	9.94	12.7	23.2	6.82	9.64
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	73.4 J [49.6 J]	59.7 J	53.9 J	39.5 J	47.3 J	26.7 J	NA	22.6	31.8	77.7	46.7	18.9	23.6

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-58-2 10 - 12 07/29/04 BCC582S10-12	BCC-58-3 0.75 - 2.75 07/29/04 BCC583S0.75-2.75	BCC-58-3 6 - 8 07/29/04 BCC583S6-8	BCC-58-3 10 - 12 07/29/04 BCC583S10-12	BCC-58-4 0.7 - 2.7 07/29/04 BCC584S0.7-2.7	BCC-58-4 0.7 - 2.7 07/29/04 BCC584S0.7-2.7DL	BCC-58-4 6 - 8 07/29/04 BCC584S6-8	BCC-58-4 10 - 12 07/29/04 BCC584S10-12	BCC-58-5 0.6 - 2.6 08/10/04 BCC-58-5-S(0.6-2.6)081004	BCC-58-5 6.5 - 8 08/10/04 BCC-58-5-S(6.5-8)081004DL
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.28 UJ	0.431 J	1.74 J	2.29 UJ	NA	0.615 J	2.03 J	0.242 J	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	3.41 J	2.21 J	2.84 J	3.43 J	NA	5.48 J	3.51 J	3.71 J	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	11.8	15.2	188	9.61	87.2	NA	56.9	21.9	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.135	0.13	0.319	0.126	0.85	NA	0.582	0.268	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.223 J	0.134 J	0.28 J	0.242 J	NA	0.226 J	0.464 J	0.201 J	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	5.68 J	18.5 J	30 J	4.77 J	NA	73.6 J	40.3 J	11.1 J	NA	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	3.4	1.76	3.15	2.99	4.47	NA	2.86	6.46	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	11 J	18.7 J	13.8 J	12.3 J	73.2 J	NA	39.5 J	9.36 J	NA	NA
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	3.87 J	10.8 J	188 J	3.96 J	NA	97.2 J	191 J	11.1 J	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	252	265	680	253	NA	*2,440*	1,380	257	99.9	*2,340*
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0092 J	0.009 J	0.0503	0.0085 J	0.0594	NA	0.0332 J	0.026 J	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	6.6	10.7	10.6	6.39	33.3	NA	17.3	8.95	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.57 U	0.56 U	0.54 U	0.574 U	NA	2.69 U	0.54 U	0.577 U	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.57 U	0.56 U	0.54 U	0.574 U	NA	2.69 U	0.149 J	0.577 U	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.14 U	1.12 U	1.08 U	1.15 U	NA	5.38 U	1.08 U	1.15 U	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	9.65	5.72	11.1	8.63	NA	13.6	9.22	15.8	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	25.5	11.8	25.7	26.3	NA	95.4	57.7	29.1	NA	NA

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-58-5 8 - 10 08/10/04 BCC-58-5-S(8-10)081004	BCC-58-6 0 - 2 08/10/04 BCC-58-6-S(0-2)081004DL	BCC-58-6 7 - 8 08/10/04 BCC-58-6-S(7-8)081004DL	BCC-58-6 8 - 10 08/10/04 BCC-58-6-S(8-10)081004DL	BCC-58-7 0.7 - 2.7 08/10/04 BCC-58-7-S(0.7-2.7)081004DL	BCC-58-7 2.7 - 4 08/10/04 BCC-58-7-S(2.7-4)081004DL	BCC-58-8 0 - 2 02/08/06 BCC58-8(0-2)-S-020806	BCC-59 1.3 - 2.3 06/02/04 BCC-59-S(1-2)
Detected Inorganics																		
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	2.79 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	NA	NA	NA	NA	NA	NA	3.43 J
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	35.9
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.215
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.265 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	14.2 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	22.5
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	32.2 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	206
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	107	1,260	964	81.8	472	10,700	440 J	258
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	NA	NA	NA	NA	NA	NA	NA	0.0433
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	22.8 J
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.321 J
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.575 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.15 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	12
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	42.4 J

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-59 6 - 8 06/02/04 BCC-59-S(6-8)	BCC-60 1.8 - 2.8 06/01/04 BCC-60-S(1-2)	BCC-60 6 - 8 06/01/04 BCC-60-S(6-8)	BCC-60-1 0.66 - 2.66 07/23/04 BCC-60-1-S(0.66-2.66)	BCC-60-1 2 - 4 07/26/04 BCC601S2-4	BCC-60-1 8 - 9 07/23/04 BCC-60-1-S(8-9)	BCC-60-2 1.25 - 3.25 07/23/04 BCC-60-2-S(1.25-3.25)	BCC-60-2 6 - 8 07/23/04 BCC-60-2(6-8)	BCC-60-2 8 - 9 07/23/04 BCC-60-2-S(8-9)	BCC-61 0 - 2 06/01/04 BCC-61-S(0-2)	BCC-61 6 - 8 06/01/04 BCC-61-S(6-8)	BCC-62 0 - 2 06/03/04 BCC-62-S(0-2)
Detected Inorganics																							
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.32 UJ	2.29 UJ	2.23 UJ	2.34 U	0.278 J	2.27 U	2.27 U	2.28 U	2.3 U	2.21 UJ	2.23 UJ	R
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	3.03 J	3.54 J	1.64 J	6.81 J	2.93	6.04 J	2.18 J	9.88 J	10.6 J	4.9 J	4.67 J	6.84 J
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	5.42	33.1	8.29	40.8 J	21.3	22.7 J	39.9 J	28.2 J	22.5 J	42.1	27.1	94.1 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0752 J	0.305	0.0935 J	0.264	0.268 J	0.0212 J	0.172	0.0902 J	0.115 U	0.29	0.243	0.112 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.0969 J	0.238 J	0.0697 J	0.586 U	0.564 U	0.569 U	0.567 U	0.571 U	0.575 U	0.307 J	0.265 J	1.13 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	4.25 J	45.5 J	3.22 J	17.3 J	8.06	9.43 J	14 J	10.6 J	7.28 J	11.2 J	10.4 J	24.8 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	2.17	4.64	1.86	7.49	3.91	6.48 J	7.79	8.78	4.73	5.32	4.72	5.33 J
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	6.38 J	25 J	5.03 J	19.7 J	8.29 J	18.2 J	17.3 J	22.9 J	15.5 J	12.8 J	11.9 J	29.6 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	2.77	13.3	1.95	8.83	6.9 J	6.04 J	6.69	7.1	5.07	10.2	8.89	68.7 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	142	525	99.5	354	231	376 J	352	343	487	271	236	364 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0384 U	0.0082 J	0.0368 U	0.0748 U	0.0372 U	0.0375 U	0.0374 U	0.0377 U	0.038 U	0.0142 J	0.0192 J	0.0695
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	4.41 J	18.3 J	4.24 J	21.3 J	9.47	15.1 J	18.1 J	18.1 J	13.5 J	13.8 J	12.2 J	16 J
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.581 U	0.44 J	0.558 U	0.586 U	0.564 U	0.569 U	0.567 U	0.571 U	0.575 U	0.554 U	0.558 U	0.561 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.581 U	0.572 U	0.558 U	0.586 U	0.564 U	0.569 U	0.567 U	0.571 U	0.575 U	0.554 U	0.558 U	0.0576 J
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.16 U	1.14 U	1.12 U	0.783 J	1.13 U	1.01 J	0.846 J	0.73 J	0.985 J	1.11 U	1.12 U	1.12 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	6.98	8.07	4.53	22.3 J	8.68 J	13.6 J	17.9 J	15.8 J	11.7 J	16.5	14.9	16.8 J
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	16.8 J	30.7 J	12.7 J	46.6 J	21 J	36.7 J	42.6 J	44.2 J	32.6 J	35.1 J	35.8 J	234 J

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-62 6 - 8 06/03/04 BCC-62-S(6-8)	BCC-75 0 - 2 06/03/04 BCC-75-S(0-2)	BCC-75 5 - 7 06/03/04 BCC-75-S(5-7)	BW9-01 0 - 2 07/16/01 BW9-01-S(0-2)-N	BW9-01 8 - 10 07/16/01 BW9-01-S(8-10)-N	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)DL	BW9-02 8 - 10 07/17/01 BW9-02-S(8-10)	BW9-03 0.7 - 2 07/28/03 BW903S(0-2)	BW9-03 0.7 - 2 07/28/03 BW903S(0-2)DL	BW9-03 3 - 5 07/28/03 BW903S(3-5)	BW9-03 8 - 10 07/28/03 BW903S(8-10)
Detected Inorganics																						
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	R	R	R	3.95 J	4.24 J	NA	1.74 J	2.12 U	1.15 J [1.73 J]	NA	0.127 J	0.192 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	6.18 J	3.43 J	6.69 J	8.89	9.09	NA	8.14	4.15	5.75 [7.39]	NA	1.01	4.9
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	36.9 J	37.4 J	61.1 J	74.8	61.3	23.3	NA	10.2	116 J [193 J]	NA	10.8 J	54 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.114 U	0.116 U	0.121 U	0.0503 U	0.0568 U	0.132	NA	0.106 U	0.445 [0.734]	NA	0.106 U	0.327
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.818 J	0.441 J	0.538 J	5.74	4.21 J	NA	2.49	0.301 J	0.483 J [0.296 J]	NA	0.529 U	0.0543 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	10.8 J	12.4 J	14.5 J	138	213	NA	82	5.55	86.6 J [164 J]	NA	5.08 J	17.5 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	5.12 J	2.54 J	10.3 J	5.93	7.38	3.88	NA	3.91	4.36 [4.69]	NA	0.776 J	7.26
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	18.6 J	8.36 J	14.1 J	142	247	126	NA	13	63.1 [111]	NA	2.31	16.7
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	0.26 J	0.612 J	0.549 U	NA	0.53 U	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	14.1 J	7.82 J	7.54 J	239	230	NA	322	5.23	67.2 [113]	NA	5.58	7.68
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	285 J	329 J	639 J	1,290	*1,540*	NA	*1,840*	265	NA	*3,680 J*	232 J	256 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0442	0.0348 U	0.0101 J	0.143	0.183	0.0447	NA	0.0107 J	0.0505 [0.0397]	NA	0.0349 U	0.0384 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	13.1 J	7.57 J	18.8 J	36.7	68.3	28.8	NA	8.62	22.5 [26.4]	NA	2.08 J	20.6
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.57 U	0.527 U	0.569 U	0.497 J	0.383 U	NA	1.1 U	0.53 U	NA	2.68 U	0.529 U	0.582 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.57 U	0.0534 J	0.569 U	0.427 J	0.426 J	0.588	NA	0.53 U	NA	2.68 U	0.529 U	0.582 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.14 U	1.05 U	1.32 U	0.547 U	0.618 U	NA	1.19 J	1.06 U	NA	5.36 UJ	1.06 UJ	0.449 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	13.7 J	12.1 J	20.5 J	13.6	10.9 J	NA	6.85	9.65	12.9 [14.6]	NA	4.48	21.3
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	46.1 J	27.7 J	42.6 J	1,290	1,880	NA	676	45.7	131 [194]	NA	5.19	41.4

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

Location ID:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-04	BW9-04	BW9-05	BW9-05	BW9-05	BW9-06	BW9-06	BW9-11	BW9-11	BW9-11	BW9-11	BW9-12	BW9-12
Sample Depth(ft BGS):											0.3 - 2	4.5 - 6.5	1.5 - 2.5	8 - 10	10 - 12	0.3 - 2	6 - 8	2 - 4	5 - 7	5 - 7	7 - 9	0.5 - 2	8 - 10
Date Collected:											07/22/03	07/22/03	07/22/03	07/22/03	07/22/03	07/22/03	07/22/03	07/31/03	07/31/03	07/31/03	07/31/03	07/30/03	07/30/03
Sample Name:											BW904S(0-2)	BW904S(4.5-6.5)	BW905S(0-2)	BW905S(8-10)	BW905S(10-12)	BW906S(0-2)	BW906S(6-8)	BW911S(0-2)	BW911S(5-7)	BW911S(5-7)DL	BW911S(7-9)	BW912S(0-2)	BW912S(8-10)
Detected Inorganics																							
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.283 J	0.308 J	0.187 J	0.129 J	0.174 J	0.261 J	0.199 J	1.03 J	NA	1.38 J	0.84 J	0.177 J	0.334 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	4.54	5.62	4.87	3.05	3.59	4.42	3.38	2.81	NA	6.28	3.46	3.14	1.79
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	38.8 J	36.6 J	29.6 J	7.39 J	10.6 J	13.3 J	11.5 J	31.7 J	96.7 J	NA	57.5 J	7.46 J	18.5 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.11 J	0.0774 J	0.0635 J	0.108 UJ	0.115 UJ	0.108 UJ	0.118 UJ	0.107 U	0.111 U	NA	0.0515 J	0.103 U	0.0551 J
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.581 U	0.562 U	0.531 U	0.0461 J	0.243 J	0.0454 J	0.0587 J	0.11 J	NA	0.566 J	0.136 J	0.0547 J	R
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	17.8 J	12.1 J	10.5 J	4.38 J	4.52 J	6.13 J	4.81 J	26	NA	161	16.4	4.12 J	14.9
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	5.89	5.94	4.33	2.55	5.46	3.48	2.84	2.73	4.64	NA	4.1	2.44	1.39
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	20.6 J	18.1 J	11.4 J	8.59 J	9.76 J	13.2 J	9.71 J	18.9 J	74.8 J	NA	24.3 J	6.58 J	11.6 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	68.7 J	6.68 J	5.84 J	3.32 J	3.9 J	4.83 J	3.67 J	69 J	NA	84.6 J	34.1 J	3.16 J	23.5 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	351 J	331 J	261 J	179 J	409 J	263 J	227 J	630 J	NA	*1,690 J*	403 J	154 J	147 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0384 U	0.0381	0.0351 U	0.0358 U	0.0378 U	0.0357 U	0.0388 U	0.18	0.0367	NA	0.0261 J	0.0339 U	0.0376
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	26.2	15.4	10.6	5.88	11.4	9.16	6.3	12.5	29.5	NA	14.4	5.88 J	16.6
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.581 U	0.562 U	0.531 U	0.542 U	0.573 U	0.541 U	0.588 U	0.535 U	NA	1.11 U	0.589 U	0.513 U	0.524 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.581 U	0.562 U	0.531 U	0.542 U	0.573 U	0.541 U	0.588 U	0.535 U	0.556 U	NA	0.589 U	0.513 U	0.524 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	0.838 J	0.812 J	0.892 J	0.591 J	0.847 J	0.588 J	0.71 J	1.07 U	NA	2.22 U	1.18 U	1.03 U	1.05 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	17 J	16.7 J	11.6 J	7.91 J	8.44 J	10.7 J	9.09 J	9.35 J	NA	23.2 J	12.6 J	6.33 J	6.54 J
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	37.4 J	38.3 J	34 J	25.2 J	29.8 J	33.6 J	25.8 J	30.3	NA	122	34.8	24.2 J	15.7

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-12 20 - 22 07/30/03 BW912S(20-22)	BW9-16 14 - 16 09/09/03 BW9-16-S(14-16)	BW9-23 0 - 2 04/19/05 BW9-23-S(0-2)041905	BW9-23 8 - 10 04/19/05 BW9-23-S(8-10)041905	BW9-24 0 - 2 04/19/05 BW9-24-S(0-2)041905	BW9-24 8 - 10 04/19/05 BW9-24-S(8-10)041905	BW9-25 0 - 2 04/19/05 BW9-25-S(0-2)041905	BW9-25 8 - 10 04/19/05 BW9-25-S(8-10)041905	BW9-26 0 - 2 04/19/05 BW9-26-S(0-2)041905
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.503 J	3.7	1.1 UJ	1.5 J	1.1 UJ	1.3 J	1.1 UJ	1.1 UJ	1.1 UJ
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	2.5	3.5	4.2	7.8	6.3	8.4	5.0	5.6	4.4
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	37.8 J	32.4 J	26.1	181	41.5	126	44.5	34.4	37.3
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0775 J	0.241	0.30 U	2.2 J	0.36 U	0.45 U	0.44 U	0.39 U	0.26 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	R	0.697 J	0.25 J	2.4	0.32 J	3.6	0.26 J	0.27 J	0.17 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	27.5	25.4	10.1	85.2	11.4	94.5	11.0	12.9	10.8
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	2.44	3.08	4.4	6.7	5.4	7.3	5.0	5.8	3.4
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	16.6 J	23.3	11.7 J	39.2 J	16.0 J	99.0 J	14.5 J	13.9 J	9.3 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	88 J	248	23.8 J	338 J	26.8 J	135 J	14.1 J	13.5 J	10.5 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	781 J	490	269	1,020	359	542	299	290	204
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.207	0.0893	0.034 J	0.33	0.035 J	1.9	0.022 J	0.040	0.058
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	31.8	18.8	11.1	24.9	13.1	58.8	12.5	15.0	8.9
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.586 U	0.297 J	0.55 U	0.75 U	0.39 U	0.60 U	0.54 U	0.57 U	0.54 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.586 U	0.551 U	0.55 U	0.75 U	0.55 U	0.60 U	0.54 U	0.57 U	0.54 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.17 U	1.1 U	0.69 J	1.0 J	0.46 J	0.90 J	0.56 J	1.0 J	0.62 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	8.48 J	9.73	12.3	16.5	15.0	14.9	13.9	17.0	12.8
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	20.5	22.1 J	43.3	452	50.2	518	46.0	44.7	33.0

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-26 8 - 10 04/19/05 BW9-26-S(8-10)041905	BW9-27 0 - 2 04/18/05 BW9-27-S(0-2)041805	BW9-27 8 - 10 04/18/05 BW9-27-S(8-10)041805	BW9-28 0 - 2 04/18/05 BW9-28-S(0-2)041805	BW9-28 8 - 10 04/18/05 BW9-28-S(8-10)041805	BW9-29 0 - 2 04/19/05 BW9-29-S(0-2)041905	BW9-29 8 - 10 04/19/05 BW9-29-S(8-10)041905	BW9-30 0 - 2 04/18/05 BW9-30-S(0-2)041805	BW9-30 8 - 10 04/18/05 BW9-30-S(8-10)041805
Detected Inorganics																			
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	1.1 UJ	0.35 J	0.38 J	1.1 UJ	0.41 J	1.1 UJ	1.2 UJ	1.2 UJ	1.1 UJ
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	5.6	6.4	4.2	5.1	5.6	5.3	6.5	9.5	3.1
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	30.5	48.2	39.1	31.7	45.5	48.3	36.0	33.2	9.1
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.37 U	0.36 U	0.39 U	0.32 U	0.42 U	0.78 J	0.44 U	0.45 U	0.16 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.23 J	0.26 J	0.20 J	0.24 J	0.30 J	0.19 J	0.20 J	0.16 J	0.17 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	11.3	16.2	12.6	10.5	12.9	10.5	12.8	12.9	4.7
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	5.5	5.6	4.6	4.8	4.6	5.2	6.8	7.3	2.8
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	15.8 J	35.1 J	11.7 J	13.2 J	17.4 J	12.5 J	14.8 J	23.6 J	8.9 J
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	15.0 J	19.3 J	15.0 J	17.0 J	29.9 J	9.1 J	13.6 J	12.6 J	3.6 J
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	300	285	440	345	315	465	345	407	208
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.035 J	0.038	0.083	0.037 U	0.092	0.0088 J	0.047	0.033 J	0.038 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	24.2	14.4	10.4	12.2	13.4	11.5	14.7	18.9	6.6
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.57 U	0.55 U	0.57 U	0.56 U	0.57 U	0.55 U	0.59 U	0.58 U	0.57 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.57 U	0.55 U	0.57 U	0.56 U	0.57 U	0.55 U	0.59 U	0.58 U	0.57 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	0.46 J	0.68 J	0.50 J	0.58 J	0.44 J	0.43 J	1.1 J	0.66 J	0.61 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	15.0	15.4	14.6	13.2	12.3	14.9	17.6	16.5	8.0
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	113	57.3	45.4	50.6	74.1	33.7	56.8	67.2	28.5

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-31 0 - 2 04/18/05 BW9-31-S(0-2)041805	BW9-31 8 - 10 04/18/05 BW9-31-S(8-10)041805	BW9-32 0 - 2 04/19/05 BW9-32-S(0-2)041905	BW9-32 8 - 10 04/19/05 BW9-32-S(8-10)041905	MWW9-01 1 - 2 07/28/03 MWW901S(0-2)	MWW9-01 8 - 10 07/28/03 MWW901S(8-10)	MWW9-01 24.5 - 26.5 07/28/03 MWW901S(24.5-26.5)	MWW9-02 0.3 - 2 07/28/03 MWW902S(0-2)	MWW9-02 8 - 10 07/28/03 MWW902S(8-10)	MWW9-02 23 - 25 07/28/03 MWW902S(23-25)
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	1.2 UJ	1.2 UJ	1.1 UJ	0.94 J	1.12 J	0.249 J	6.2 J	0.866 J	0.707 J	0.551 J
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	4.7	4.1	7.7	6.1	6.43	1.45	2.64	4.71	3.82	3.73
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	43.8	12.6	47.3	77.5	96.5 J	16.4 J	15.1 J	59.6 J	50.6 J	44 J
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.46 U	0.18 U	0.38 U	0.31 U	0.157	0.107 U	0.105 U	0.143	0.123	0.0637 J
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.19 J	0.18 J	0.79	2.9	1.22	0.0244 J	0.527 U	0.0856 J	0.546 U	0.0734 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	14.4	5.2	18.3	51.2	33.1 J	7.29 J	15 J	38.9 J	41.6 J	37.4 J
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	7.3	3.2	5.3	5.5	5.15	1.34	2.36	5.06	3.15	3.24
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	16.4 J	11.1 J	19.9 J	56.0 J	45.3	7.36	14.4	66.9	26.7	32.4
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	7.3 J	4.2 J	20.9 J	88.9 J	89.5	65.2	308	46.7	153	237
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	367	263	397	506	504 J	141 J	137 J	869 J	1,030 J	756 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.010 J	0.039 U	0.058	0.081	0.0652	0.0353 U	0.0422	0.122	0.318	0.238
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	19.0	7.2	14.3	22.4	40.9	7.65	12.9	26.5	48.9	34
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.60 U	0.59 U	0.54 U	0.58 U	0.557 U	0.534 U	0.527 U	0.547 U	0.256 J	0.532 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.60 U	0.59 U	0.54 U	0.58 U	0.557 U	0.534 U	0.527 U	0.547 U	0.546 U	0.532 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.1 J	0.48 J	0.79 J	0.83 J	0.483 J	1.07 UJ	1.05 UJ	0.388 J	1.09 UJ	0.478 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	17.5	9.5	14.7	13.0	13.7	5.93	7.38	10.6	10.3	9.85
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	41.7	30.7	92.2	414	136	14.3	14.4	44.2	24.6	28.9

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)DL	SW9-02 0 - 2 06/27/01 SW9-02-S(0-2)062701	SW9-02 0 - 2 06/27/01 SW9-02-S(02)062701DL	SW9-03 0 - 2 06/27/01 SW9-03-S(0-2)062701	SW9-04 0 - 2 06/27/01 SW9-04-S(0-2)062701	SW9-05 0 - 2 06/27/01 SW9-05-S(0-2)062701	SW9-06 0 - 2 06/27/01 SW9-06-S(0-2)062701	SW9-07 0 - 2 06/27/01 SW9-07-S(0-2)062701	SW9-08 0 - 2 06/27/01 SW9-08-S(0-2)
Detected Inorganics																				
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	NA	1.95 J	NA	6.26 J	2.17 U [2.16 U]	2.15 U	2.17 U	1.23 J	0.687 J	2.24 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	NA	10.1	NA	19.2	6.09 [5.45]	6.29	5.13	7.67	5.77	4.42
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	60	NA	126	NA	47.1 [41.5]	42.9	34.8	131	378	31.1
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.109 U	NA	0.103 U	NA	0.282 [0.17]	0.19	0.131	0.116 U	0.112 U	0.0573 J
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	NA	2.11 J	NA	5.86	0.255 J [0.222 J]	0.133 J	0.124 J	1.33	3.75	0.33 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	*249*	NA	*523*	18.7 [15.4]	13.2	10.4	63.1	24.5	10.1
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	7.35	NA	14.1	NA	5.47 [5.37]	6.38	5	8.51	5.96	5.09
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	154	NA	460	NA	24.4 [27.3]	34.2	13.3	53.8	22.5	14.3
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	NA	175	NA	429	41.6 [45.1]	29.4	14.7	232	108	6.12
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	NA	1,360	NA	*2,650*	339 [299]	292	281	402	271	264
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0973	NA	0.328	NA	0.0338 J [0.0321 J]	0.0355	0.0322 J	0.155	0.248	0.0152 J
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	61.2	NA	154	NA	16 [14.8]	15.6	13.7	30	13.6	12.1
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	NA	2.73 U	NA	1.71 J	0.544 U [0.541 U]	0.536 U	0.543 U	0.581 U	0.558 U	0.561 U
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.653	NA	0.566	NA	0.544 U [0.541 U]	0.536 U	0.543 U	0.229 J	0.299 J	0.561 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	NA	5.46 U	NA	10.3 U	1.09 U [1.08 U]	1.07 U	1.09 U	1.16 U	1.12 U	1.12 U
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	NA	15.4	NA	17.1	14.4 [14.6]	15.9	14	17.7	13.7	14.5
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	NA	942	NA	2,340	95.9 [88.4]	97.7	41.9	437	516	35.8 J

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09 0 - 2 06/27/01 SW9-09-S(0-2)062701	SW9-10 0 - 2 06/27/01 SW9-10-S(0-2)062701	SW9-10 0 - 2 06/27/01 SW9-10-S(02)062701DL	SW9-11 0 - 2 01/03/02 SW9-11-S(0-2)DL	SW9-12 0 - 2 01/03/02 SW9-12-S(0-2)	SW9-12 0 - 2 01/03/02 SW9-12-S(0-2)DL	SW9-13 0 - 2 01/03/02 SW9-13-S(0-2)
Detected Inorganics																	
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	2.12 U	NA	10.4 U	NA	NA	NA	NA
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	6.96	NA	9.43	8.13 J	NA	NA	NA
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	118	105	NA	NA	NA	NA	NA
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.113	0.0872 J	NA	NA	NA	NA	NA
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	2.14	NA	3.47	NA	NA	NA	NA
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	68.9	NA	195	108	NA	229 [160]	NA
Chromium VI (hexavalent)	- -	- -	9,200	30	30	3.3	- -	*240*	- -	- -	NA	NA	NA	NA	0.439 J [0.836]	NA	NA
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	6.6	7.38	NA	NA	NA	NA	NA
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	48	160	NA	NA	NA	NA	NA
Cyanide (total)	- -	0.39	250	4	4	0.1	- -	*250*	- -	- -	NA	NA	NA	NA	NA	NA	NA
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	67.7	NA	139	NA	NA	NA	NA
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	1,140	NA	*1,570*	*1,530 J*	NA	*1,600 J* [1,400 J]	307 J
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.103	0.115	NA	NA	NA	NA	NA
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	21.2	50.3	NA	NA	NA	NA	NA
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.531 U	NA	2.59 U	NA	NA	NA	NA
Silver	- -	1	9,000	4.5	13	0.1	- -	*2,900*	- -	- -	0.531 U	0.519 U	NA	NA	NA	NA	NA
Thallium	- -	- -	130	2.3	2.3	4.2	- -	5,900	- -	- -	1.06 U	NA	5.19 U	NA	NA	NA	NA
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	15.9	NA	12.6	NA	NA	NA	NA
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	315 J	NA	758 J	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Inorganic Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C01 11 - 11.5 03/02/05 AOIW9-C01-S-030205	AOIW9-C02 4 - 4.5 03/02/05 AOIW9-C02-S-030205	AOIW9-C03 2 - 2.5 03/02/05 AOIW9-C03-S-030205	AOIW9-C04 11 - 11.5 03/02/05 AOIW9-C04-S-030205	AOIW9-C05 2 - 2.5 03/02/05 AOIW9-C05-S-030205	AOIW9-C06 2 - 2.5 03/02/05 AOIW9-C06-S-030205	AOIW9-C06 4 - 4.5 03/11/05 A0IW9-C06-S-031105	AOIW9-C07 2 - 2.5 03/02/05 AOIW9-C07-S-030205	AOIW9-C08 2 - 2.5 03/02/05 AOIW9-C08-S-030205	AOIW9-C09 2 - 2.5 03/02/05 AOIW9-C09-S-030205
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.6	77.4	79.3	80.6	81.3	86.4	91.2	98.8 [87.7]	90.7	88.7 [89]
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C10 2 - 2.5 03/02/05 AOIW9-C10-S-030205	AOIW9-C11 2 - 2.5 03/02/05 AOIW9-C11-S-030205	AOIW9-C12 2 - 2.5 03/02/05 AOIW9-C12-S-030205	AOIW9-C13 2 - 2.5 03/02/05 AOIW9-C13-S-030205	AOIW9-C13 4 - 4.5 03/11/05 A0IW9-C13-S-031105	AOIW9-C14 2 - 2.5 03/02/05 AOIW9-C14-S-030205	AOIW9-C14 4 - 4.5 03/11/05 A0IW9-C14-S-031105	AOIW9-C15 2 - 2.5 03/11/05 A0IW9-C15-S-031105	AOIW9-C16 2 - 2.5 03/11/05 A0IW9-C16-S-031105	AOIW9-C17 2 - 2.5 03/11/05 A0IW9-C17-S-031105
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.8	89.8	86.6	85.9	90.9	81.2	89.5	94.3	84.3	89.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C17 4 - 4.5 04/19/05 AOIW9-C17-S-041905	AOIW9-C18 2 - 2.5 03/11/05 A0IW9-C18-S-031105	AOIW9-C19 2 - 2.5 03/11/05 A0IW9-C19-S-031105	AOIW9-C19 4 - 4.25 05/11/05 AOIW9-C19-S-051105	AOIW9-C19 4 - 4.5 04/19/05 AOIW9-C19-S-041905	AOIW9-C20 2 - 2.5 03/11/05 A0IW9-C20-S-031105	AOIW9-C21 2 - 2.5 03/11/05 A0IW9-C21-S-031105	AOIW9-C21 4 - 4.5 04/19/05 AOIW9-C21-S-041905	AOIW9-C22 2 - 2.5 03/11/05 A0IW9-C22-S-031105	AOIW9-C22 4 - 4.5 04/19/05 AOIW9-C22-S-041905
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	96.6	87.0	88.1	87.9	95.5	89.5	86.1	94.0	89.1	95.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C23 2 - 2.3 05/09/05 AOIW9-C23-S-050905	AOIW9-C23 4 - 4.25 05/11/05 AOIW9-C23-S-051105	AOIW9-C24 4 - 4.25 05/11/05 AOIW9-C24-S-051105	AOIW9-C25 4 - 4.25 05/11/05 AOIW9-C25-S-051105	AOIW9-C26 4 - 4.25 05/11/05 AOIW9-C26-S-051105	AOIW9-C27 4 - 4.25 05/11/05 AOIW9-C27-S-051105	AOIW9-C28 4 - 4.25 05/11/05 AOIW9-C28-S-051105	AOIW9-C29 4 - 4.25 05/11/05 AOIW9-C29-S-051105	AOIW9-C30 4 - 4.25 05/11/05 AOIW9-C30-S-051105	AOIW9-C31 4 - 4.5 05/19/05 AOIW9-C31-S-051905
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	97.4	91.3	93.5	90.6	92.0	90.3	90.1	90.8	90.0	90.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C32 2 - 2.3 05/09/05 AOIW9-C32-S-050905	AOIW9-C32 4 - 4.5 05/19/05 AOIW9-C32-S-051905	AOIW9-C33 4 - 4.5 05/19/05 AOIW9-C33-S-051905	AOIW9-C34 2 - 2.3 05/09/05 AOIW9-C34-S-050905	AOIW9-C35 2 - 2.3 05/09/05 AOIW9-C35-S-050905	AOIW9-C35 4 - 4.25 05/11/05 AOIW9-C35-S-051105	AOIW9-C36 4 - 4.25 05/11/05 AOIW9-C36-S-051105	AOIW9-C37 4 - 4.5 05/19/05 AOIW9-C37-S-051905	AOIW9-C38 4 - 4.25 05/11/05 AOIW9-C38-S-051105	AOIW9-C39 2 - 2.3 05/09/05 AOIW9-C39-S-050905
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.4	90.7	89.9	97.4	88.3	88.4	86.9	89.0	87.6	86.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C39 4 - 4.25 05/11/05 AOIW9-C39-S-051105	AOIW9-C40 4 - 4.25 05/11/05 AOIW9-C40-S-051105	AOIW9-C41 4 - 4.25 05/11/05 AOIW9-C41-S-051105	AOIW9-C42 4 - 4.25 05/11/05 AOIW9-C42-S-051105	AOIW9-C43 4 - 4.25 05/11/05 AOIW9-C43-S-051105	AOIW9-C44 4 - 4.25 05/11/05 AOIW9-C44-S-051105	AOIW9-C45 4 - 4.25 05/11/05 AOIW9-C45-S-051105	AOIW9-C46 4 - 4.25 05/11/05 AOIW9-C46-S-051105	AOIW9-C47 4 - 4.5 05/19/05 AOIW9-C47-S-051905	AOIW9-C48 4 - 4.25 05/11/05 AOIW9-C48-S-051105
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.0	89.2	89.3	89.3	95.4	89.4	87.3	88.2	92.3	88.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C49 4 - 4.25 05/11/05 AOIW9-C49-S-051105	AOIW9-C50 4 - 4.25 05/11/05 AOIW9-C50-S-051105	AOIW9-C51 2 - 2.3 06/07/05 AOIW9-C51-S-060705	AOIW9-C52 2 - 2.3 06/07/05 AOIW9-C52-S-060705	AOIW9-C53 2 - 3 06/07/05 AOIW9-C53-060705	AOIW9-C54 2 - 3 06/08/05 AOIW9-C54-060805	AOIW9-C55 2 - 3 06/08/05 AOIW9-C55-060805	AOIW9-C56 2 - 3 06/08/05 AOIW9-C56-060805	AOIW9-C57 2 - 3 06/08/05 AOIW9-C57-060805	AOIW9-C58 2 - 3 06/08/05 AOIW9-C58-060805
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	88.0	87.7	86.9	82.1	89.6	88.2	89.2	92.5	86.7	86.5 [86.9]
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-C59 2 - 3 06/08/05 AOIW9-C59-060805	AOIW9-C60 2 - 3 06/08/05 AOIW9-C60-060805	AOIW9-CSW 0 - 4 05/19/05 AOIW9-CSW7-S-051905	AOIW9-CSW2 0 - 4 05/11/05 AOIW9-CSW2-S-051105	AOIW9-CSW3 0 - 4 05/11/05 AOIW9-CSW3-S-051105	AOIW9-CSW4 0 - 4 05/11/05 AOIW9-CSW4-S-051105	AOIW9-CSW5 0 - 4 05/11/05 AOIW9-CSW5-S-051105	AOIW9-CSW6 0 - 4 05/11/05 AOIW9-CSW6-S-051105	AOIW9-CSW7 0 - 4 05/11/05 AOIW9-CSW7-S-051105
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.1	86.7	89.3	89.7	86.0	88.8	93.3	92.7	93.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-CSW8 0 - 4 05/11/05 AOIW9-CSW8-S-051105	AOIW9-CSW9 0 - 2 06/07/05 AOIW9-CSW9-S-060705	AOIW9-CSW10 0 - 2 06/07/05 AOIW9-CSW10-S-060705	AOIW9-CSW11 0 - 2 06/07/05 AOIW9-CSW11-S-060705	AOIW9-CSW12 0 - 2 06/07/05 AOIW9-CSW12-S-060705	AOIW9-CSW13 0 - 3 06/08/05 AOIW9-CSW13-060805	AOIW9-CSW14 0 - 3 06/08/05 AOIW9-CSW14-060805	AOIW9-CSW15 0 - 2 06/07/05 AOIW9-CSW15-S-060705	AOIW9-CSW16 0 - 3 06/08/05 AOIW9-CSW16-060805
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	94.2	91.3	91.6	89.8 [89.4]	90.1	86.8	91.7	91.3	85.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	AOIW9-CSW17 0 - 3 06/08/05 AOIW9-CSW17-060805	AOIW9-UCNW 1 - 2 06/03/05 AOIW9-UCNW-S-060305	AOIW9-V001 11 - 11.5 03/02/05 AOIW9-V001-S-030205	AOIW9-V002 2 - 2.5 03/02/05 AOIW9-V002-S-030205	AOIW9-V002 4 - 4.5 03/11/05 A0IW9-V002-S-031105	AOIW9-V003 2 - 2.5 03/02/05 AOIW9-V003-S-030205	AOIW9-V003 4 - 4.5 03/11/05 A0IW9-V003-S-031105	AOIW9-V003 6 - 6.5 04/19/05 AOIW9-V003-S-041905	BCC-32 0.6 - 2.6 08/11/04 BCC-32B-S(0.6-2.6)081104
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.8	89.9	84.5	91.9	89.6	82.5	86.6	92.9	92.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-33 0.8 - 2.8 08/10/04 BCC-33B-S(0.8-2.8)081004	BCC-34 0.7 - 2 06/02/04 BCC-34-S(1-2)	BCC-34-2 0.5 - 2.5 07/27/04 BCC342S0.5-2.5	BCC-35 0.8 - 2.8 08/10/04 BCC-35B-S-(0.8-2.8)081004	BCC-36 0.5 - 2.5 08/10/04 BCC-36B-S-(0.5-2.5)081004	BCC-41 0.5 - 1.5 08/11/04 BCC-41B-S(0.5-1.5)081104	BCC-41 0.5 - 2.5 08/06/04 BCC-41B-S(0.5-2.5)080604	BCC-43 0.6 - 2.6 08/11/04 BCC-43B-S(0.6-2.6)081104	BCC-44 0.7 - 2 06/01/04 BCC-44-S(1-2)
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	96.8	86.2	87.3	88.2	77.0	88.4	90.3	94.8	85.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-45 0.66 - 2.66 08/11/04 BCC-45B-S(0.66-2.66)081104	BCC-46 0.33 - 2.33 08/11/04 BCC-46B-S(0.33-2.33)081104	BCC-51 0.7 - 2 06/03/04 BCC-51-S(1-2)	BCC-51 6 - 8 06/03/04 BCC-51-S(6-8)	BCC-51-1 0 - 2 08/06/04 BCC-51-1-S(0-2)080604	BCC-51-1 7.33 - 8 08/06/04 BCC-51-1-S(7.33-8)080604	BCC-51-1 8 - 10 08/06/04 BCC-51-1-S(8-10)080604	BCC-51-2 0 - 2 08/06/04 BCC-51-2-S(0-2)080604	BCC-51-2 7 - 8 08/06/04 BCC-51-2-S(7-8)080604
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	88.7	94.4	82.9	94.9	91.1	96.2	94.8	88.3	95.1
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-51-2 8 - 10 08/06/04 BCC-51-2-S(8-10)080604	BCC-51-3 0 - 2 08/06/04 BCC-51-3-S(0-2)080604	BCC-51-3 5 - 6 08/06/04 BCC-51-3-S(5-6)080604	BCC-51-4 0 - 2 08/06/04 BCC-51-4-S(0-2)080604	BCC-51-4 7.8 - 8 08/06/04 BCC-51-4-S(7.8-8)080604	BCC-51-4 8 - 10 08/06/04 BCC-51-4-S(8-10)080604	BCC-52 0 - 2 06/03/04 BCC-52-S(0-2)	BCC-52 6 - 8 06/03/04 BCC-52-S(6-8)	BCC-53 0 - 2 06/03/04 BCC-53-S(0-2)	BCC-53 6 - 8 06/03/04 BCC-53-S(6-8)
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	95.2	94.8	92.9	91.7	94.1	92.3	87.9	90.0	92.0	85.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-53 9 - 10 08/04/04 BCC-53B-S(9-10)080404	BCC-53-1 0 - 2 08/03/04 BCC-53-1-S(0-2)	BCC-53-1 7 - 8 08/03/04 BCC-53-1-S(7-8)	BCC-53-2 0 - 2 08/04/04 BCC-53-2-S(0-2)080404	BCC-53-2 7.5 - 8 08/04/04 BCC-53-2-S(7.5-8)080404	BCC-53-2 8 - 10 08/04/04 BCC-53-2-S(8-10)080404	BCC-53-3 0 - 1.33 08/04/04 BCC-53-3-S(0-1.33)080404	BCC-53-3 6 - 7.33 08/04/04 BCC-53-3-S(6-7.33)080404	BCC-53-4 0 - 2 08/03/04 BCC-53-4-S(0-2)
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.0	90.2	88.6	85.8	88.8	90.9	87.7	91.6	92.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-53-4 6 - 7.33 08/03/04 BCC-53-4-S(6-7.33)	BCC-54 0 - 2 06/03/04 BCC-54-S(0-2)	BCC-54 6 - 8 06/03/04 BCC-54-S(6-8)	BCC-55 0 - 2 06/03/04 BCC-55-S(0-2)	BCC-55 6 - 8 06/03/04 BCC-55-S(6-8)	BCC-56 0.66 - 2.66 08/11/04 BCC-56B-S(0.66-2.66)081104	BCC-57 0.75 - 2.75 08/06/04 BCC-57B-S(0.75-2.75)080604	BCC-58 0.6 - 2 06/03/04 BCC-58-S(1-2)	BCC-58 6 - 8 06/03/04 BCC-58-S(6-8)	BCC-58 10 - 12 07/29/04 BCC58BS10-12	BCC-58-1 0.75 - 2.75 07/29/04 BCC581S0.75-2.75	BCC-58-1 6 - 8 07/29/04 BCC581S6-8
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.2	89.7 [89.3]	91.3	90.2	86.4	83.0	88.2	92.0	91.5	87.4	93.3	90.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-58-1 10 - 12 07/29/04 BCC581S10-12	BCC-58-2 0.5 - 2.5 07/29/04 BCC582S0.5-2.5	BCC-58-2 6 - 8 07/29/04 BCC582S6-8	BCC-58-2 10 - 12 07/29/04 BCC582S10-12	BCC-58-3 0.75 - 2.75 07/29/04 BCC583S0.75-2.75	BCC-58-3 6 - 8 07/29/04 BCC583S6-8	BCC-58-3 10 - 12 07/29/04 BCC583S10-12	BCC-58-4 0.7 - 2.7 07/29/04 BCC584S0.7-2.7	BCC-58-4 6 - 8 07/29/04 BCC584S6-8	BCC-58-4 10 - 12 07/29/04 BCC584S10-12	BCC-58-5 0.6 - 2.6 08/10/04 BCC-58-5-S(0.6-2.6)081004	BCC-58-5 6.5 - 8 08/10/04 BCC-58-5-S(6.5-8)081004
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	84.4	89.8	91.8	87.7	89.2	92.6	87.2	92.9	92.6	86.7	96.3	91.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-58-5 8 - 10 08/10/04 BCC-58-5-S(8-10)081004	BCC-58-6 0 - 2 08/10/04 BCC-58-6-S(0-2)081004	BCC-58-6 7 - 8 08/10/04 BCC-58-6-S(7-8)081004	BCC-58-6 8 - 10 08/10/04 BCC-58-6-S(8-10)081004	BCC-58-7 0.7 - 2.7 08/10/04 BCC-58-7-S(0.7-2.7)081004	BCC-58-7 2.7 - 4 08/10/04 BCC-58-7-S(2.7-4)081004	BCC-58-8 0 - 2 02/08/06 BCC58-8(0-2)-S-020806	BCC-59 1.3 - 2.3 06/02/04 BCC-59-S(1-2)	BCC-59 6 - 8 06/02/04 BCC-59-S(6-8)	BCC-60 1.8 - 2.8 06/01/04 BCC-60-S(1-2)
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	95.5	80.6	77.8	94.9	91.7	91.4	88.0	86.9	86.0	87.5
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-60 6 - 8 06/01/04 BCC-60-S(6-8)	BCC-60-1 0.66 - 2.66 07/23/04 BCC-60-1-S(0.66-2.66)	BCC-60-1 2 - 4 07/26/04 BCC601S2-4	BCC-60-1 8 - 9 07/23/04 BCC-60-1-S(8-9)	BCC-60-2 1.25 - 3.25 07/23/04 BCC-60-2-S(1.25-3.25)	BCC-60-2 6 - 8 07/23/04 BCC-60-2(6-8)	BCC-60-2 8 - 9 07/23/04 BCC-60-2-S(8-9)	BCC-60-3 1.6 - 3.6 07/23/04 BCC-60-3-S(1.6-3.6)	BCC-60-3 6 - 8 07/23/04 BCC-60-3-S(6-8)	BCC-60-3 7 - 9 07/23/04 BCC-60-3-S(7-9)	BCC-60-4 0.66 - 2.66 07/23/04 BCC-60-4-S(0.66-2.66)	BCC-60-4 7 - 8 07/23/04 BCC-60-4-S(7-8)
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.6	85.3	88.7	88.0	88.2	87.6	86.9	92.7	88.7	89.9	88.1	87.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-60-4 8 - 9.5 07/23/04 BCC-60-4-S(8-9.5)	BCC-60-6 2.5 - 3.7 08/10/04 BCC-60-6-S(2.5-3.7)081004	BCC-60-6 6 - 8 08/10/04 BCC-60-6-S(6-8)081004	BCC-60-6 11 - 11.33 08/10/04 BCC-60-6-S(11-11.33)081004	BCC-60-7 2.2 - 4.2 08/09/04 BCC-60-7-S(2.2-4.2)080904	BCC-60-7 4.2 - 4.9 08/09/04 BCC-60-7-S(4.2-4.9)080904	BCC-60-7 8.25 - 9.66 08/09/04 BCC-60-7-S(8.25-9.66)080904	BCC-60-8 1.1 - 2.1 08/09/04 BCC-60-8-S(1.1-2.1)080904
Detected Solids																			
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	83.3 [85.5]	85.8	85.2	82.3	93.0	86.5	89.6	89.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-60-8 2 - 2.5 08/09/04 BCC-60-8-S(2-2.5)080904	BCC-60-8 5.2 - 7.2 08/09/04 BCC-60-8-S(5.2-7.2)080904	BCC-60-10 0.8 - 1.5 08/30/04 BCC-60-10(0.8-1.5)083004	BCC-60-11 2 - 4 08/30/04 BCC-60-11(2-4)	BCC-60-13 2 - 4 08/30/04 BCC-60-13(2-4)083004	BCC-60B 2 - 4 07/26/04 BCC60BS2-4	BCC-60B 6 - 8 07/26/04 BCC60BS6-8	BCC-60B 8 - 10 07/26/04 BCC60BS8-10	BCC-61 0 - 2 06/01/04 BCC-61-S(0-2)	BCC-61 6 - 8 06/01/04 BCC-61-S(6-8)	BCC-62 0 - 2 06/03/04 BCC-62-S(0-2)	BCC-62 6 - 8 06/03/04 BCC-62-S(6-8)
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	85.9	86.4	84.0	86.6	86.7	90.0	91.0	88.5	90.3	89.6	89.1	87.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BCC-63 0.66 - 1.66 08/11/04 BCC-63B-S(0.66-1.66)081104	BCC-69 0.85 - 2.85 08/06/04 BCC-69B-S(0.85-2.85)080604	BCC-72 0.66 - 1.66 08/11/04 BCC-72B-S(0.66-1.66)081104	BCC-75 0 - 2 06/03/04 BCC-75-S(0-2)	BCC-75 5 - 7 06/03/04 BCC-75-S(5-7)	BW9-01 0 - 2 07/16/01 BW9-01-S(0-2)-N	BW9-01 8 - 10 07/16/01 BW9-01-S(8-10)-N	BW9-01B 10.5 - 11 07/21/04 BW901BS10.5-11	BW9-01-E1 2 - 3 07/22/04 BW901E1S2-3	BW9-01-E1 8 - 8.5 07/22/04 BW901E1S8-8.5	BW9-01-E2 2 - 4 07/29/04 BW901E2S2-4
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	95.6	94.3	92.7	94.9	87.9	NA	NA	83.4	88.9	85.5	92.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	91.4	81.0	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-E2 6 - 8 07/29/04 BW901E2S6-8	BW9-01-E2 8.2 - 9 08/09/04 BW9-01-E2-S(8.2-9)080904	BW9-01-E3 2 - 4 08/02/04 BW9-01-E3-S(2-4)-080204	BW9-01-E3 8 - 10 08/02/04 BW9-01-E3-S(8-10)-080204	BW9-01-E3 10 - 12 08/02/04 BW9-01-E3-S(10-12)-080204	BW9-01-E3S7.5 0.75 - 2 12/21/04 BW9-01-E3S7.5-S(0.75-2)	BW9-01-E3S7.5 2 - 3 12/21/04 BW9-01-E3S7.5-S(2-3)	BW9-01-E3S9 0.75 - 2 12/21/04 BW9-01-E3S9-S(0.75-2)	BW9-01-E3S9 2 - 4 12/21/04 BW9-01-E3S9-S(2-4)
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.0	92.9	89.6	92.0	87.7	86.1	89.8	86.7	89.0	
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-E4 2 - 4 08/03/04 BW9-01-E4-S(2-4)	BW9-01-E4 8 - 10 08/03/04 BW9-01-E4-S(8-10)	BW9-01-E4 10 - 12 08/03/04 BW9-01-E4-S(10-12)	BW9-01-E4.5S5.5 2.5 - 4 12/21/04 BW9-01-E4.5S5.5-S(2.5-4)	BW9-01-E4.5S7.5 2.5 - 4 12/21/04 BW9-01-E4.5S7.5-S(2.5-4)	BW9-01-E4.5S7.5 5 - 7 12/21/04 BW9-01-E4.5S7.5-S(5-7)	BW9-01-N1 2 - 3 07/23/04 BW9-01-N1-S(2-3)	BW9-01-N1 5 - 6 07/23/04 BW9-01-N1-S(5-6)	BW9-01-N1E1 2 - 2.5 07/22/04 BW901N1E1S2-2.5	BW9-01-N1E1 7 - 8 07/22/04 BW901N1E1S7-8
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.6	91.4	91.7	87.2	89.1	81.2	90.5	90.9	90.2	90.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-N1E1 8 - 10 07/22/04 BW901N1E1S8-10	BW9-01-N1E3 2 - 4 08/03/04 BW9-01-N1E3-S(2-4)	BW9-01-N1E3 8 - 10 08/03/04 BW9-01-N1E3-S(8-10)	BW9-01-N1E3 10 - 12 08/03/04 BW9-01-N1E3-S(10-12)	BW9-01-N1W1 3 - 4 07/22/04 BW901N1W1S3-4	BW9-01-N1W1 7 - 8 07/22/04 BW901N1W1S7-8	BW9-01-N1W1 11.5 - 12 07/22/04 BW901N1W1S11.5-12	BW9-01-S1 2 - 2.25 07/22/04 BW901S1S2-2.25	BW9-01-S1 6.5 - 8 07/22/04 BW901S1S6.5-8	BW9-01-S1 8 - 10 07/22/04 BW901S1S8-10	BW9-01-S1 10 - 10.25 07/22/04 BW901S1S10-10.25
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.1	92.1	93.1	91.2	89.5	90.3	83.9	88.7	81.7	88.2 [82.8]	87.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-S1 14.5 - 15 07/22/04 BW901S1S14.5-15	BW9-01-S1E1 2 - 3 07/22/04 BW901S1E1S2-3	BW9-01-S1E1 8.5 - 9 07/22/04 BW901S1E1S8.5-9	BW9-01-S1E2 2 - 4 08/09/04 BW9-01-S1E2-S(2-4)080904	BW9-01-S1E2 8 - 9 08/09/04 BW9-01-S1E2-S(8-9)080904	BW9-01-S1E2 10 - 11 08/09/04 BW9-01-S1E2-S(10-11)080904	BW9-01-S1E3 2 - 4 08/03/04 BW9-01-S1E3-S(2-4)	BW9-01-S1E3 6.5 - 8 08/03/04 BW9-01-S1E3-S(6.5-8)	BW9-01-S1E3 8 - 10 08/03/04 BW9-01-S1E3-S(8-10)
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.3	86.1	90.2	87.5	91.4	88.5	87.9	86.4	86.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-S1E3 10 - 12 08/03/04 BW9-01-S1E3-S(10-12)	BW9-01-S1E4 8 - 8.5 08/30/04 BW9-01-S1E4(8-8.5)083004	BW9-01-S1E4 10 - 12 08/30/04 BW9-01-S1E4(10-12)083004	BW9-01-S1W1 2 - 3.5 07/23/04 BW9-01-S1W1-S(2-3.5)	BW9-01-S1W1 7 - 8 07/23/04 BW9-01-S1W1-S(7-8)	BW9-01-S1W1 8 - 10 07/23/04 BW9-01-S1W1-S(8-10)	BW9-01-S2 2 - 4 08/02/04 BW9-01-S2-S(2-4)080204	BW9-01-S2 8 - 10 08/02/04 BW9-01-ES2-S(8-10)080204
Detected Solids																			
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.6	87.1	91.7	92.3	90.7	86.3	90.5	91.5
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-01-S2 10 - 11 08/02/04 BW9-01-S2-S(10-11)080204	BW9-01-S2E1 6 - 8 08/30/04 BW9-01-S2E1(6-8)	BW9-01-S2E2 10 - 12 08/30/04 BW9-01-S2E2(10-12)	BW9-01-S2E3 0.6 - 1.2 08/30/04 BW9-01-S2E3(0.6-1.2)	BW9-01-S2E3 10 - 12 08/30/04 BW9-01-S2E3(10-12)	BW9-01-S2W1 2 - 4 08/02/04 DUP-099-080204	BW9-01-W1 2 - 4 07/21/04 BW901W1S2-4	BW9-01-W1 7 - 9 07/22/04 BW901W1S7-9	BW9-01-W2 2 - 4 07/29/04 BW901W2S2-4	BW9-01-W2 7 - 8 07/29/04 BW901W2S7-8	BW9-01-W2 10 - 12 07/29/04 BW901W2S10-12	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.7	90.2	88.9	87.4	92.3	87.3	93.4	84.4	84.5	89.9	91.4	91.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02 2 - 4 12/17/01 BW9-02-S(2-4)	BW9-02 8 - 10 07/17/01 BW9-02-S(8-10)	BW9-02-E1 0.4 - 2 12/17/01 BW9-02-E1-S(0-2)	BW9-02-E1N1 2 - 4 01/02/02 BW9-02E1N1-2-4	BW9-02-E1N2 0.5 - 2 01/02/02 BW9-02E1N2-0-2	BW9-02-E1S1 2 - 4 01/02/02 BW9-02E1S1-2-4	BW9-02-E1S2 0.5 - 2 01/02/02 BW9-02E1S2-0-2	BW9-02-E1S2 2 - 4 01/30/02 BW9-02-E1S2(2-4)	BW9-02-E1S3 2 - 4 01/02/02 BW9-02E1S3-2-4	BW9-02-E1S4 0.5 - 2 01/02/02 BW9-02E1S4-0-2	BW9-02-E1S9 2 - 4 02/27/02 BW9-02E1S9-2-4	BW9-02-E1S25 0.5 - 2 03/01/02 BW9-02E1S25-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.5	94.3	85.0	79.6	80.5	92.4	89.2	87.8	87.4	86.8	88.8	85.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E2S1 0.5 - 2 01/11/02 BW9-02E2S1-0-2-N	BW9-02-E2S2 0.5 - 2 01/30/02 BW9-02-E2S2(0-2)	BW9-02-E2S3 0.9 - 2 01/11/02 BW9-02E2S3-0-2-N	BW9-02-E3N1 0.9 - 2 02/11/02 BW9-02E3N1-0-2	BW9-02-E3S1 2 - 4 02/06/02 BW9-02E3S1-2-4	BW9-02-E3S2 2 - 4 02/04/02 BW9-02E3S2-2-4	BW9-02-E3S3 2 - 4 02/06/02 BW9-02E3S3-2-4	BW9-02-E3S5 0.5 - 2 02/11/02 BW9-02E3S5-0-2	BW9-02-E3S7 0.5 - 2 02/20/02 BW9-02E3S7-0-2	BW9-02-E3S9 2 - 4 02/26/02 BW9-02E3S9-2-4	BW9-02-E3S11 0.5 - 2 02/26/02 BW9-02E3S11-0-2	BW9-02-E3S13 2 - 4 02/26/02 BW9-02E3S13-2-4
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	89.1	NA	86.7	87.6	88.1	87.8	89.2	85.3	87.0	84.5	92.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.2	NA	90.1	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E4 0 - 2 02/11/02 BW9-02E4-0-2	BW9-02-E4S2 2 - 4 02/06/02 BW9-02E4S2-2-4	BW9-02-E4S4 0.5 - 2 02/11/02 BW9-02E4S4-0-2	BW9-02-E4S25 0.5 - 2 03/01/02 BW9-02E4S25-0-2	BW9-02-E5S1 0.5 - 2 02/11/02 BW9-02E5S1-0-2	BW9-02-E5S3 2 - 4 02/11/02 BW9-02E5S3-2-4	BW9-02-E5S5 2 - 4 02/14/02 BW9-02E5S5-2-4	BW9-02-E5S7 2 - 4 02/14/02 BW9-02E5S7-2-4	BW9-02-E5S9 2 - 4 02/20/02 BW9-02E5S9-2-4	BW9-02-E5S13 2 - 4 02/26/02 BW9-02E5S13-2-4	BW9-02-E6 0 - 2 02/13/02 BW9-02E6-0-2	BW9-02-E6S2 2 - 4 02/11/02 BW9-02E6S2-2-4
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	88.0	89.5	87.7	90.4	88.6	86.8	89.8	89.7	88.5	89.7	87.3	87.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E7N1 0 - 2 02/14/02 BW9-02-E7N1-0-2	BW9-02-E7S1 2 - 4 02/14/02 BW9-02-E7S1-2-4	BW9-02-E7S3 2 - 4 02/14/02 BW9-02-E7S3-2-4	BW9-02-E7S5 2 - 4 02/14/02 BW9-02-E7S5-2-4	BW9-02-E7S7 2 - 4 02/20/02 BW9-02-E7S7-2-4	BW9-02-E7S12 2 - 4 02/26/02 BW9-02-E7S12-2-4	BW9-02-E7S25 0.5 - 2 03/01/02 BW9-02-E7S25-0-2	BW9-02-E8S2 2 - 4 02/13/02 BW9-02-E8S2-2-4	BW9-02-E8S11 2 - 4 02/26/02 BW9-02-E8S11-2-4	BW9-02-E8S17 2 - 4 02/28/02 BW9-02-E8S17-2-4	BW9-02-E9N1 0 - 2 02/19/02 BW9-02-E9N1-0-2	BW9-02-E9S1 2 - 4 02/14/02 BW9-02-E9S1-2-4
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	88.1	95.0	89.3	88.5	88.7	88.2	88.2	89.6	87.8	88.1	87.7	89.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E9S3 2 - 4 02/14/02 BW9-02-E9S3-2-4	BW9-02-E9S5 2 - 4 02/20/02 BW9-02-E9S5-2-4	BW9-02-E9S15 2 - 4 02/28/02 BW9-02-E9S15-2-4	BW9-02-E10 0 - 2 02/19/02 BW9-02-E10-0-2	BW9-02-E10S2 2 - 4 02/14/02 BW9-02-E10S2-2-4	BW9-02-E10S4 0.5 - 2 02/20/02 BW9-02-E10S4-0-2	BW9-02-E10S4 2 - 4 12/21/04 BW9-02-E10S4-S(2-4)	BW9-02-E10S25 0.5 - 2 03/01/02 BW9-02-E10S25-0-2	BW9-02-E11N1 0 - 2 02/20/02 BW9-02-E11N1-0-2	BW9-02-E11S1 0 - 2 02/19/02 BW9-02-E11S1-0-2	BW9-02-E11S1 2 - 4 02/19/02 BW9-02-E11S1-2-4	BW9-02-E11S3 0 - 2 02/19/02 BW9-02-E11S3-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.3	87.3	87.5	86.5	89.1	86.4	88.6	86.3	86.1	88.5	90.0	85.5
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E11S3 2 - 4 02/19/02 BW9-02E11S3-2-4	BW9-02-E11S11 2 - 4 02/25/02 BW9-02E11S11-2-4	BW9-02-E11S14 2 - 4 02/28/02 BW9-02E11S14-2-4	BW9-02-E12S2 2 - 4 02/19/02 BW9-02E12S2-2-4	BW9-02-E13S7 2 - 4 02/26/02 BW9-02E13S7-2-4	BW9-02-E13S13 2 - 4 02/28/02 BW9-02E13S13-2-4	BW9-02-E13S25 0.5 - 2 02/28/02 BW9-02E13S25-0-2	BW9-02-E14S6 2 - 4 02/26/02 BW9-02E14S6-2-4	BW9-02-E15N1 2 - 4 02/26/02 BW9-02E15N1-2-4	BW9-02-E15N3 0.5 - 2 02/28/02 BW9-02E15N3-0-2	BW9-02-E15S5 0.5 - 2 02/26/02 BW9-02E15S5-0-2
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	88.2	88.8	87.7	87.6	88.7	86.3	83.4	88.2	90.0	85.0	91.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-E16S4 0 - 2 02/26/02 BW9-02E16S4-0-2	BW9-02-E16S9 0 - 2 02/27/02 BW9-02E16S9-0-2	BW9-02-E16S13 0 - 2 03/01/02 BW9-02E16S13-0-2	BW9-02-E16S20 0 - 2 03/01/02 BW9-02E16S20-0-2	BW9-02-E17N1 0 - 2 02/26/02 BW9-02E17N1-0-2	BW9-02-E17S1 0 - 2 02/26/02 BW9-02E17S1-0-2	BW9-02-E17S3 0 - 2 02/26/02 BW9-02E17S3-0-2	BW9-02-E17S7 0 - 2 02/27/02 BW9-02E17S7-0-2	BW9-02-E18 0 - 2 02/26/02 BW9-02E18-0-2	BW9-02-E18S2 0 - 2 02/26/02 BW9-02E18S2-0-2	BW9-02-N1 4 - 6 12/17/01 BW9-02-N1-S(4-6)	BW9-02-N2 2 - 4 12/17/01 BW9-02-N2-S(2-4)
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.8	88.5	89.5	89.9	87.0	88.8	90.3	87.6	88.6	86.8	89.9	89.1
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-N3 0.5 - 2 12/19/01 BW9-02-N3-S(0-2)	BW9-02-S1 0.8 - 2 12/17/01 BW9-02-S1-S(0-2)	BW9-02-S1 2 - 4 12/17/01 BW9-02-S1-S(2-4)	BW9-02-S2 2 - 4 12/17/01 BW9-02-S2-S(2-4)	BW9-02-S3 2 - 4 12/19/01 BW9-02-S3-S(2-4)	BW9-02-S4 2 - 4 12/19/01 BW9-02-S4-S(2-4)	BW9-02-S5 0.5 - 2 12/20/01 BW9-02-S5-S(0-2)	BW9-02-W1 0.8 - 2 12/17/01 BW9-02-W1-S(0-2)	BW9-02-W1N1 2 - 4 01/02/02 BW9-02W1N1-2-4	BW9-02-W1N2 2 - 4 01/02/02 BW9-02W1N2-2-4	BW9-02-W1N3 0 - 2 01/14/02 BW9-02W1N3-0-2-N	BW9-02-W1S1 2 - 4 01/02/02 BW9-02W1S1-2-4
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.5	80.5	89.2	88.5	87.7	85.9	84.6	88.7	86.9	88.1	NA	88.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	86.0	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-W1S2 2 - 4 01/02/02 BW9-02W1S2-2-4	BW9-02-W1S3 0.5 - 2 01/02/02 BW9-02W1S3-0-2	BW9-02-W1S3 2 - 4 01/30/02 BW9-02-W1S3(2-4)	BW9-02-W1S4 0.5 - 2 01/02/02 BW9-02W1S4-0-2	BW9-02-W2 0.8 - 2 01/30/02 BW9-02-W2(0-2)	BW9-02-W2 2 - 4 02/11/02 BW9-02W2-(2-4)	BW9-02-W2N1 0 - 2 01/04/02 BW9-02W2N1-0-2	BW9-02-W2N1 2 - 4 01/04/02 BW9-02W2N1-2-4	BW9-02-W2N2 0 - 2 01/04/02 BW9-02W2N2-0-2	BW9-02-W2S1 0.5 - 2 01/04/02 BW9-02W2S1-0-2	BW9-02-W2S1 2 - 4 01/04/02 BW9-02W2S1-2-4	BW9-02-W2S2 0.5 - 2 01/04/02 BW9-02W2S2-0-2
Detected Solids																								
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.2	86.6	87.3	83.3	89.0	91.8	89.4	92.3	89.7	90.0	90.1	90.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-W2S2 2 - 4 01/04/02 BW9-02W2S2-2-4	BW9-02-W2S3 2 - 4 01/16/02 BW9-02W2S3-2-4	BW9-02-W2S4 0.5 - 2 01/22/02 BW9-02W2S4-0-2	BW9-02-W2S16 2 - 4 02/28/02 BW9-02W2S16-2-4	BW9-02-W2S25 0.5 - 2 03/01/02 BW9-02W2S25-0-2	BW9-02-W3 2 - 4 01/22/02 BW9-02W3-2-4	BW9-02-W3N1 2 - 4 01/16/02 BW9-02W3N1-2-4	BW9-02-W3N2 0 - 2 01/22/02 BW9-02W3N2-0-2	BW9-02-W3S1 2 - 4 01/16/02 BW9-02W3S1-2-4	BW9-02-W3S2 2 - 4 01/16/02 BW9-02W3S2-2-4	BW9-02-W3S3 2 - 4 01/22/02 BW9-02W3S3-2-4	BW9-02-W3S4 0.5 - 2 01/23/02 BW9-02W3S4-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	84.7	88.8	88.6	84.5	88.4	89.3	92.1	86.3	89.0	89.7	86.3	86.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-W3S9 2 - 4 02/28/02 BW9-02W3S9-2-4	BW9-02-W3S13 2 - 4 02/28/02 BW9-02W3S13-2-4	BW9-02-W4 2 - 4 01/22/02 BW9-02W4-2-4	BW9-02-W4N1 2 - 4 01/22/02 BW9-02W4N1-2-4	BW9-02-W4N2 0 - 2 01/23/02 BW9-02W4N2-0-2	BW9-02-W4S1 2 - 4 01/22/02 BW9-02W4S1-2-4	BW9-02-W4S2 2 - 4 01/22/02 BW9-02W4S2-2-4	BW9-02-W4S3 2 - 4 01/23/02 BW9-02W4S3-2-4	BW9-02-W4S4 0.5 - 2 01/25/02 BW9-02W4S4-0-2	BW9-02-W5 0 - 2 01/23/02 BW9-02W5-0-2	BW9-02-W5N1 0 - 2 01/23/02 BW9-02W5N1-0-2	BW9-02-W5S1 0.5 - 2 01/23/02 BW9-02W5S1-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.9	87.7	89.0	89.7	83.9	87.8	86.7	85.1	87.8	85.8	86.8	89.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-02-W5S2 0.5 - 2 01/23/02 BW9-02W5S2-0-2	BW9-02-W5S3 0.5 - 2 01/25/02 BW9-02W5S3-0-2	BW9-02-W5S25 0.5 - 2 03/01/02 BW9-02W5S25-0-2	BW9-02-W7S9 0.5 - 2 02/28/02 BW9-02W7S9-0-2	BW9-03 0.7 - 2 07/28/03 BW903S(0-2)	BW9-03 3 - 5 07/28/03 BW903S(3-5)	BW9-03 8 - 10 07/28/03 BW903S(8-10)	BW9-04 0.3 - 2 07/22/03 BW904S(0-2)	BW9-04 4.5 - 6.5 07/22/03 BW904S(4.5-6.5)	BW9-05 1.5 - 2.5 07/22/03 BW905S(0-2)	BW9-05 8 - 10 07/22/03 BW905S(8-10)	BW9-05 10 - 12 07/22/03 BW905S(10-12)	BW9-06 0.3 - 2 07/22/03 BW906S(0-2)	BW9-06 6 - 8 07/22/03 BW906S(6-8)
Detected Solids																									
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.5	86.7	88.1	94.8	93.2 [92.4]	94.5	85.9	86.0	89.0	94.1	92.2	87.3	92.5	85.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-11 2 - 4 07/31/03 BW911S(0-2)	BW9-11 5 - 7 07/31/03 BW911S(5-7)	BW9-11 7 - 9 07/31/03 BW911S(7-9)	BW9-12 0.5 - 2 07/30/03 BW912S(0-2)	BW9-12 8 - 10 07/30/03 BW912S(8-10)	BW9-12 20 - 22 07/30/03 BW912S(20-22)	BW9-16 14 - 16 09/09/03 BW9-16-S(14-16)	BW9-23 0 - 2 04/19/05 BW9-23-S(0-2)041905	BW9-23 8 - 10 04/19/05 BW9-23-S(8-10)041905	BW9-24 0 - 2 04/19/05 BW9-24-S(0-2)041905	BW9-24 8 - 10 04/19/05 BW9-24-S(8-10)041905	BW9-25 0 - 2 04/19/05 BW9-25-S(0-2)041905
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	93.4	89.9	85.0	97.5	95.5	85.4	90.7	90.1	66.3	91.0	83.4	91.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-25 8 - 10 04/19/05 BW9-25-S(8-10)041905	BW9-26 0 - 2 04/19/05 BW9-26-S(0-2)041905	BW9-26 8 - 10 04/19/05 BW9-26-S(8-10)041905	BW9-27 0 - 2 04/18/05 BW9-27-S(0-2)041805	BW9-27 2 - 4 04/29/05 BW9-27(2-4)-S-042905	BW9-27 4 - 6 04/29/05 BW9-27(4-6)-S-042905	BW9-27 6 - 8 04/29/05 BW9-27(6-8)-S-042905	BW9-27 8 - 10 04/18/05 BW9-27-S(8-10)041805	BW9-27-E(9-14') 9 - 14 05/18/05 E927C-S(9-14)-051805
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.3	92.0	87.4	91.1	90.7	86.2	88.4	87.2	87.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-27-N(3-5') 3 - 5 05/17/05 N927C-S(3-5)-051705	BW9-27-N(5-9') 5 - 9 05/17/05 N927C-S(5-9)-051705	BW9-27-NA(3-5') 3 - 5 05/19/05 NA927C-S(3-5)-051905	BW9-27-NA(9-14') 9 - 14 05/18/05 NA927C-S(9-14)-051805	BW9-27-NB(3-5') 3 - 5 05/19/05 NB927C-S(3-5)-051905	BW9-27-NB(5-9) 5 - 9 05/25/05 NB927C-S(5-9)-052505	BW9-27-NB(9-14') 9 - 14 05/18/05 NB927C-S(9-14)-051805	BW9-27-NB(9-14') 9 - 14 05/19/05 NB927C-S(9-14)-051905	BW9-27-NBN(3-5) 3 - 5 05/24/05 NBN927C-S(3-5)-052405
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	2.0	NA	NA	9.2
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.5	89.0	85.7	86.7	93.0	NA	86.7	87.2	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-27-NBW(3-5) 3 - 5 05/25/05 NBW927C-S(3-5)-052505	BW9-27-NC(3-5') 3 - 5 05/19/05 NC927C-S(3-5)-051905	BW9-27-NC(5-9) 5 - 9 05/25/05 NC927C-S(5-9)-052505	BW9-27-NCE(3-5') 3 - 5 05/31/05 NCE927C-S(3-5)-053105	BW9-27-NCE(5-9') 5 - 9 05/31/05 NCE927C-S(5-9)-053105	BW9-27-NCN(5-9') 5 - 9 05/31/05 NCN927C-S(5-9)-053105	BW9-27-NCW(5-9') 5 - 9 05/31/05 NCW927C-S(5-9)-053105	BW9-27-S(5-9') 5 - 9 05/17/05 S927C-S(5-9)-051705	BW9-27-S(9-14') 9 - 14 05/17/05 S927C-S(9-14)-051705
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	8.0	NA	9.4	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	88.9	NA	98.3	89.8	90.6	91.7	81.1	86.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-27-SA(3-5') 3 - 5 05/18/05 SA927C-S(3-5)-051805	BW9-27-SB(3-5') 3 - 5 05/18/05 SB927C-S(3-5)-051805	BW9-27-SB(5-9') 5 - 9 05/19/05 SB927C-S(5-9)-051905	BW9-27-SB(9-14') 9 - 14 05/19/05 SB927C-S(9-14)-051905	BW9-27-SC(3-5') 3 - 5 05/18/05 SC927C-S(3-5)-051805	BW9-27-SCE(3-5) 3 - 5 05/24/05 SCE927C-S(3-5)-052405	BW9-27-SCS(3-5) 3 - 5 05/24/05 SCS927C-S(3-5)-052405	BW9-27-SCS(9-14) 9 - 14 05/25/05 SCS927C-S(9-14)-052505	BW9-27-SCW(3-5) 3 - 5 05/25/05 SCW927C-S(3-5)-052505
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	13.6	9.1	12.2	7.5
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	84.1	89.8	87.8	88.0	89.7	NA	NA	NA	NA
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-27-SCW(9-14) 9 - 14 05/25/05 SCW927C-S(9-14)-052505	BW9-27-SD(3-5') 3 - 5 05/19/05 SD927C-S(3-5)-051905	BW9-27-W(5-9') 5 - 9 05/18/05 W927C-S(5-9)-051805	BW9-27-W(9-14') 9 - 14 05/18/05 W927C-S(9-14)-051805	BW9-27-WA(3-5') 3 - 5 05/18/05 WA927C-S(3-5)-051805	BW9-27-WB(3-5') 3 - 5 05/18/05 WB927C-S(3-5)-051805	BW9-27-WC(3-5') 3 - 5 05/18/05 WC927C-S(3-5)-051805	BW9-28 0 - 2 04/18/05 BW9-28-S(0-2)041805	BW9-28 8 - 10 04/18/05 BW9-28-S(8-10)041805
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	9.7	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	90.5	89.3	87.5	88.4	89.8	87.6	89.6	87.5
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-29 0 - 2 04/19/05 BW9-29-S(0-2)041905	BW9-29 8 - 10 04/19/05 BW9-29-S(8-10)041905	BW9-30 0 - 2 04/18/05 BW9-30-S(0-2)041805	BW9-30 8 - 10 04/18/05 BW9-30-S(8-10)041805	BW9-31 0 - 2 04/18/05 BW9-31-S(0-2)041805	BW9-31 8 - 10 04/18/05 BW9-31-S(8-10)041805	BW9-32 0 - 2 04/19/05 BW9-32-S(0-2)041905	BW9-32 8 - 10 04/19/05 BW9-32-S(8-10)041905	BW9-33 0 - 2 04/18/05 BW9-33-S(0-2)041805
Detected Solids																				
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.2	85.2	86.5	87.1	83.1	85.3	92.2	86.9	86.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-33 8 - 10 04/18/05 BW9-33-S(8-10)041805	BW9-34 0 - 2 04/18/05 BW9-34-S(0-2)041805	BW9-34 8 - 10 04/18/05 BW9-34-S(8-10)041805	BW9-35 0 - 2 04/18/05 BW9-35-S(0-2)041805	BW9-35 8 - 10 04/18/05 BW9-35-S(8-10)041805	BW9-36 0 - 2 04/18/05 BW9-36-S(0-2)041805	BW9-36 8 - 9 04/18/05 BW9-36-S(8-9)041805	BW9-37 0 - 2 04/18/05 BW9-37-S(0-2)041805	BW9-37 8 - 10 04/18/05 BW9-37-S(8-10)041805
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.9	89.9	88.7	90.8	87.3	92.0	90.0	92.2	91.9
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW9-38 0 - 2 04/19/05 BW9-38-S(0-2)041905	BW9-38 8 - 10 04/19/05 BW9-38-S(8-10)041905	BW9-39 0 - 2 04/19/05 BW9-39-S(0-2)041905	BW9-39 8 - 10 04/19/05 BW9-39-S(8-10)041905	BW9-40 0 - 2 04/19/05 BW9-40-S(0-2)041905	BW9-40 8 - 10 04/19/05 BW9-40-S(8-10)041905	BW9-41 0 - 2 04/19/05 BW9-41-S(0-2)041905	BW9-41 8 - 10 04/19/05 BW9-41-S(8-10)041905	MWW9-01 1 - 2 07/28/03 MWW901S(0-2)	MWW9-01 8 - 10 07/28/03 MWW901S(8-10)
Detected Solids																					
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.4	89.8	90.2	82.7	90.6	88.1	92.1	86.4 [84.7]	89.8	93.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	MWW9-01 24.5 - 26.5 07/28/03 MWW901S(24.5-26.5)	MWW9-02 0.3 - 2 07/28/03 MWW902S(0-2)	MWW9-02 8 - 10 07/28/03 MWW902S(8-10)	MWW9-02 23 - 25 07/28/03 MWW902S(23-25)	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)	SW9-02 0 - 2 06/27/01 SW9-02-S(0-2)062701	SW9-03 0 - 2 06/27/01 SW9-03-S(0-2)062701	SW9-04 0 - 2 06/27/01 SW9-04-S(0-2)062701	SW9-05 0 - 2 06/27/01 SW9-05-S(0-2)062701	SW9-06 0 - 2 06/27/01 SW9-06-S(0-2)062701	SW9-07 0 - 2 06/27/01 SW9-07-S(0-2)062701
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	94.8	91.4	91.6	94.0	91.7	97.1	92.0 [92.4]	93.2	92.0	86.1	89.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-08 0 - 2 06/27/01 SW9-08-S(0-2)	SW9-09 0 - 2 06/27/01 SW9-09-S(0-2)062701	SW9-09 8 - 10 01/03/02 SW9-09-S(8-10)	SW9-09-E1 6 - 8 01/04/02 SW9-09E1-6-8	SW9-09-E1 8 - 10 01/29/02 SW9-09E1-(8-10)	SW9-09-E1N1 6 - 8 01/04/02 SW9-09E1N1-6-8-N	SW9-09-E1N1 10 - 12 01/31/02 SW9-09-E1N1(10-12)	SW9-09-E1N1 12 - 14 01/31/02 SW9-09-E1N1(12-14)	SW9-09-E1N2 8 - 10 01/31/02 SW9-09-E1N2(8-10)	SW9-09-E1N2 14 - 16 02/12/02 SW9-09E1N2-14-16	SW9-09-E1N3 0.5 - 2 01/22/02 SW9-09E1N3-0-2	SW9-09-E1N3 2 - 4 01/22/02 SW9-09E1N3-2-4
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.1	94.1	91.1	88.3	89.6	NA	88.2	92.2	87.3	85.3	90.5	91.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	89.2	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E1N3 4 - 6 01/22/02 SW9-09E1N3-4-6	SW9-09-E1N3 6 - 8 02/12/02 SW9-09E1N3-6-8	SW9-09-E1N3 8 - 10 02/12/02 SW9-09E1N3-8-10	SW9-09-E1N3 10 - 12 02/12/02 SW9-09E1N3-10-12	SW9-09-E1N3 12 - 14 02/12/02 SW9-09E1N3-12-14	SW9-09-E1S1 10 - 12 01/29/02 SW9-09E1S1-(10-12)	SW9-09-E1S2 2 - 4 01/03/02 SW9-09E1S2-2-4	SW9-09-E1S2 4 - 6 01/03/02 SW9-09E1S2-4-6	SW9-09-E1S2 6 - 8 01/29/02 SW9-09E1S2-(6-8)	SW9-09-E1S2 10 - 12 01/29/02 SW9-09-E1S2(10-12)	SW9-09-E1S3 0 - 2 01/29/02 SW9-09E1S3-(0-2)
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.2	93.7	91.0	91.5	89.4	91.3	90.8	86.8	90.9	92.5	93.1
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E1S3 2 - 4 01/29/02 SW9-09E1S3-(2-4)	SW9-09-E1S3 4 - 6 01/29/02 SW9-09E1S3-(4-6)	SW9-09-E2 8 - 10 01/04/02 SW9-09E2-8-10	SW9-09-E2 12 - 14 02/12/02 SW9-09E2-12-14	SW9-09-E2N1 0 - 2 01/04/02 SW9-09E2N1-0-2-N	SW9-09-E2N1 6 - 8 01/04/02 SW9-09E2N1-6-8-N	SW9-09-E2N1 14 - 16 02/13/02 SW9-09E2N1-14-16	SW9-09-E2N2 0 - 2 01/22/02 SW9-09E2N2-0-2	SW9-09-E2N2 2 - 4 01/22/02 SW9-09E2N2-2-4	SW9-09-E2N2 4 - 6 01/22/02 SW9-09E2N2-4-6	SW9-09-E2N2 12 - 14 02/06/02 SW9-09-E2N2(12-14)	SW9-09-E2N3 0.5 - 2 02/12/02 SW9-09E2N3-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.0	90.3	89.4	90.2	NA	NA	85.5	88.6	86.3	86.7	86.7	86.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	86.8	91.0	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E2N3 2 - 4 02/12/02 SW9-09E2N3-2-4	SW9-09-E2N3 4 - 6 02/12/02 SW9-09E2N3-4-6	SW9-09-E2N3 6 - 8 02/12/02 SW9-09E2N3-6-8	SW9-09-E2N3 8 - 10 02/12/02 SW9-09E2N3-8-10	SW9-09-E2N3 10 - 12 02/12/02 SW9-09E2N3-10-12	SW9-09-E2S1 10 - 12 01/29/02 SW9-09E2S1-(10-12)	SW9-09-E2S2 0 - 2 01/31/02 SW9-09E2S2-0-2	SW9-09-E2S2 2 - 4 01/31/02 SW9-09E2S2-2-4	SW9-09-E2S2 6 - 8 01/31/02 SW9-09E2S2-6-8	SW9-09-E2S2 10 - 12 01/31/02 SW9-09E2S2-10-12	SW9-09-E3 2 - 4 12/20/01 SW9-09-E3-S(2-4)	SW9-09-E3 4 - 6 12/20/01 SW9-09-E3-S(4-6)
Detected Solids																								
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.1	89.8	91.1	85.4	91.7	88.7	89.0	92.8	90.3	92.5	82.8	83.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E3 6 - 8 02/04/02 SW9-09E3-6-8	SW9-09-E3 8 - 10 02/04/02 SW9-09E3-8-10	SW9-09-E3 10 - 12 02/04/02 SW9-09E3-10-12	SW9-09-E3N1 0 - 2 01/22/02 SW9-09E3N1-0-2	SW9-09-E3N1 10 - 12 02/13/02 SW9-09E3N1-10-12	SW9-09-E3N1 12 - 14 02/13/02 SW9-09E3N1-12-14	SW9-09-E3N2 0 - 2 02/13/02 SW9-09E3N2-0-2	SW9-09-E3N2 2 - 4 02/13/02 SW9-09E3N2-2-4	SW9-09-E3N2 4 - 6 02/13/02 SW9-09E3N2-4-6	SW9-09-E3N2 6 - 8 02/13/02 SW9-09E3N2-6-8	SW9-09-E3N2 8 - 10 02/13/02 SW9-09E3N2-8-10	SW9-09-E3N2 10 - 12 02/13/02 SW9-09E3N2-10-12
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	84.4	84.7	88.6	88.8	86.4	88.6	85.3	88.8	87.3	85.3	84.8	87.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E3N2 12 - 14 02/13/02 SW9-09E3N2-12-14	SW9-09-E3N3 0.5 - 2 02/14/02 SW9-09E3N3-0-2	SW9-09-E3N3 2 - 4 02/14/02 SW9-09E3N3-2-4	SW9-09-E3N3 4 - 6 02/14/02 SW9-09E3N3-4-6	SW9-09-E3N3 6 - 8 02/14/02 SW9-09E3N3-6-8	SW9-09-E3N3 8 - 10 02/14/02 SW9-09E3N3-8-10	SW9-09-E3N3 10 - 12 02/14/02 SW9-09E3N3-10-12	SW9-09-E3N3 12 - 14 02/14/02 SW9-09E3N3-12-14	SW9-09-E3S1 10 - 12 01/31/02 SW9-09E3S1-10-12	SW9-09-E3S2 2 - 4 01/25/02 SW9-09E3S2-2-4	SW9-09-E3S2 4 - 6 01/25/02 SW9-09E3S2-4-6	SW9-09-E3S2 6 - 8 01/25/02 SW9-09E3S2-6-8
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	87.1	90.6	90.5	90.1	92.9	92.3	92.8	91.0	87.6	94.9	93.4	94.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E3S2 8 - 10 01/25/02 SW9-09E3S2-8-10	SW9-09-E3S3 0 - 2 02/12/02 SW9-09E3S3-0-2	SW9-09-E4 0 - 2 12/20/01 SW9-09-E4-S(0-2)	SW9-09-E4 6 - 8 02/04/02 SW9-09E4-6-8	SW9-09-E4 8 - 10 02/04/02 SW9-09E4-8-10	SW9-09-E4N1 4 - 6 02/06/02 SW9-09E4N1-4-6	SW9-09-E4N1 6 - 8 02/06/02 SW9-09E4N1-6-8	SW9-09-E4N1 8 - 9 02/06/02 SW9-09E4N1-8-9	SW9-09-E4N3 0.5 - 2 02/18/02 SW9-09E4N3-0-2	SW9-09-E4N3 2 - 4 02/18/02 SW9-09E4N3-2-4	SW9-09-E4N3 4 - 6 02/18/02 SW9-09E4N3-4-6	SW9-09-E4N3 6 - 8 02/18/02 SW9-09E4N3-6-8
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.3	89.7	89.1	90.2	84.3	90.8	87.9	92.4	93.1	92.9	92.7	93.7
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E4N3 8 - 10 02/18/02 SW9-09E4N3-8-10	SW9-09-E4N3 10 - 12 02/18/02 SW9-09E4N3-10-12	SW9-09-E4N3 12 - 14 02/18/02 SW9-09E4N3-12-14	SW9-09-E4S1 10 - 12 01/31/02 SW9-09E4S1-10-12	SW9-09-E4S3 0 - 2 02/18/02 SW9-09E4S3-0-2	SW9-09-E5 0.5 - 2 02/06/02 SW9-09E5-0-2	SW9-09-E5 2 - 4 02/06/02 SW9-09E5-2-4	SW9-09-E5 4 - 6 02/06/02 SW9-09E5-4-6	SW9-09-E5 6 - 8 02/06/02 SW9-09E5-6-8	SW9-09-E5N1 0.5 - 2 02/13/02 SW9-09E5N1-0-2	SW9-09-E5N1 2 - 4 02/13/02 SW9-09E5N1-2-4	SW9-09-E5N2 0.5 - 2 02/18/02 SW9-09E5N2-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	94.0	90.6	90.1	86.8	88.5	91.3	90.9	91.1	88.9	90.1	92.7	90.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-E5N2 2 - 4 02/18/02 SW9-09E5N2-2-4	SW9-09-E5N2 4 - 6 02/18/02 SW9-09E5N2-4-6	SW9-09-E5N2 6 - 8 02/18/02 SW9-09E5N2-6-8	SW9-09-E5N2 8 - 10 02/18/02 SW9-09E5N2-8-10	SW9-09-E5N2 10 - 12 02/18/02 SW9-09E5N2-10-12	SW9-09-E5N2 12 - 14 02/18/02 SW9-09E5N2-12-14	SW9-09-E5S2 0.5 - 2 02/19/02 SW9-09E5S2-0-2	SW9-09-N1 8 - 10 01/03/02 SW9-09N1-8-10	SW9-09-N1 10 - 12 01/31/02 SW9-09-N1(10-12)	SW9-09-N1 12 - 14 02/19/02 SW9-09N1-12-14	SW9-09-N2 4 - 6 12/18/01 SW9-09-N2-S(4-6)	SW9-09-N2 6 - 8 01/29/02 SW9-09-N2(6-8)
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	92.8	92.8	89.4	85.6	87.2	92.8	93.3	89.9	89.6	86.0	85.1	89.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-N2 8 - 10 01/29/02 SW9-09-N2(8-10)	SW9-09-N2 10 - 12 01/29/02 SW9-09-N2(10-12)	SW9-09-N2 14 - 16 02/27/02 SW9-09N2-14-16	SW9-09-N3 0.5 - 2 12/20/01 SW9-09-N3-S(0-2)	SW9-09-N3 2 - 4 12/20/01 SW9-09-N3-S(2-4)	SW9-09-S1 8 - 10 01/29/02 SW9-09S1-(8-10)	SW9-09-S2 4 - 6 12/18/01 SW9-09-S2-S(4-6)	SW9-09-S3 0 - 2 12/20/01 SW9-09-S3-S(0-2)	SW9-09-S3 2 - 4 12/20/01 SW9-09-S3-S(2-4)	SW9-09-W1 6 - 8 01/03/02 SW9-09W1-6-8	SW9-09-W1 10 - 12 02/12/02 SW9-09W1-10-12	SW9-09-W1N1 4 - 6 01/03/02 SW9-09W1N1-4-6
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	86.8	89.4	83.6	93.0	92.2	85.0	86.9	90.2	91.9	91.8	79.8	92.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W1N1 6 - 8 01/03/02 SW9-09W1N1-6-8	SW9-09-W1N1 14 - 16 02/27/02 SW9-09W1N1-14-16	SW9-09-W1N2 4 - 6 01/03/02 SW9-09W1N2-4-6	SW9-09-W1N2 6 - 8 01/03/02 SW9-09W1N2-6-8	SW9-09-W1N2 8 - 10 01/29/02 SW9-09W1N2-(8-10)	SW9-09-W1N2 10 - 12 01/29/02 SW9-09W1N2-(10-12)	SW9-09-W1N2 14 - 16 02/27/02 SW9-09W1N2-14-16	SW9-09-W1N3 0.5 - 2 01/17/02 SW9-09W1N3-0-2	SW9-09-W1N3 2 - 4 01/17/02 SW9-09W1N3-2-4	SW9-09-W1N3 4 - 6 01/17/02 SW9-09W1N3-(4-6)	SW9-09-W1N3 6 - 8 01/17/02 SW9-09W1N3-(6-8)
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.6	82.2	87.6	85.1	80.3	80.4	90.4	92.3	91.6	94.0	92.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W1N3 8 - 10 02/18/02 SW9-09W1N3-8-10	SW9-09-W1N3 10 - 12 02/18/02 SW9-09W1N3-10-12	SW9-09-W1N3 12 - 14 02/18/02 SW9-09W1N3-12-14	SW9-09-W1S1 6 - 8 01/03/02 SW9-09W1S1-6-8	SW9-09-W1S1 8 - 10 02/06/02 SW9-09W1S1-8-10	SW9-09-W1S2 2 - 4 01/03/02 SW9-09W1S2-2-4	SW9-09-W1S2 4 - 6 02/04/02 SW9-09W1S2-4-6	SW9-09-W1S2 6 - 8 02/04/02 SW9-09W1S2-6-8	SW9-09-W1S2 8 - 10 02/04/02 SW9-09W1S2-8-10	SW9-09-W1S2 10 - 12 02/04/02 SW9-09W1S2-10-12	SW9-09-W1S2 12 - 14 02/04/02 SW9-09W1S2-12-14
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	90.7	95.3	92.0	87.3	88.6	92.5	90.3	87.5	87.5	84.8	87.6
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W1S3 0 - 2 01/23/02 SW9-09W1S3-0-2	SW9-09-W2 4 - 6 12/18/01 SW9-09-W2-S(4-6)	SW9-09-W2 12 - 14 02/12/02 SW9-09W2-12-14	SW9-09-W2N1 2 - 4 01/03/02 SW9-09W2N1-2-4	SW9-09-W2N1 10 - 12 02/12/02 SW9-09W2N1-10-12	SW9-09-W2N1 14 - 16 02/27/02 SW9-09W2N1-14-16	SW9-09-W2N2 0 - 2 01/17/02 SW9-09W2N2-0-2	SW9-09-W2N2 4 - 6 01/17/02 SW9-09W2N2-(4-6)	SW9-09-W2N2 6 - 8 01/17/02 SW9-09W2N2-(6-8)	SW9-09-W2N2 8 - 10 02/18/02 SW9-09W2N2-8-10	SW9-09-W2N2 10 - 12 02/18/02 SW9-09W2N2-10-12
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	94.6	83.5	81.5	87.6	86.1	73.6	85.9	94.4	86.3	92.9	94.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W2N2 12 - 14 02/18/02 SW9-09W2N2-12-14	SW9-09-W2N3 0.5 - 2 02/18/02 SW9-09W2N3-0-2	SW9-09-W2N3 2 - 4 02/18/02 SW9-09W2N3-2-4	SW9-09-W2N3 4 - 6 02/18/02 SW9-09W2N3-4-6	SW9-09-W2N3 6 - 8 02/18/02 SW9-09W2N3-6-8	SW9-09-W2S1 8 - 10 01/17/02 SW9-09W2S1-8-10	SW9-09-W2S1 10 - 12 01/31/02 SW9-09-W2S1(10-12)	SW9-09-W2S2 2 - 4 01/03/02 SW9-09W2S2-2-4	SW9-09-W2S2 4 - 6 01/29/02 SW9-09W2S2-(4-6)	SW9-09-W2S2 6 - 8 01/29/02 SW9-09W2S2-(6-8)	SW9-09-W2S2 8 - 10 01/29/02 SW9-09W2S2-(8-10)
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.2	92.0	93.7	93.8	94.4	80.1	83.8	89.2	86.9	83.5	82.8
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W2S2 10 - 12 01/29/02 SW9-09W2S2-(10-12)	SW9-09-W2S2 12 - 14 01/29/02 SW9-09W2S2-(12-14)	SW9-09-W2S2 14 - 16 02/18/02 SW9-09W2S2-14-16	SW9-09-W2S3 0 - 2 01/23/02 SW9-09W2S3-0-2	SW9-09-W2S3 2 - 4 01/23/02 SW9-09W2S3-(2-4)	SW9-09-W2S3 4 - 6 01/23/02 SW9-09-W2S3(4-6)	SW9-09-W2S3 6 - 8 01/23/02 SW9-09-W2S3(6-8)	SW9-09-W2S3 8 - 10 01/23/02 SW9-09-W2S3(8-10)	SW9-09-W2S3 10 - 12 02/19/02 SW9-09W2S3-10-12	SW9-09-W2S3 12 - 14 02/19/02 SW9-09W2S3-12-14	SW9-09-W3 0.5 - 2 12/20/01 SW9-09-W3-S(0-2)
Detected Solids																						
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	79.4	79.2	79.1	93.9	93.9	94.4	94.3	90.7	94.1	72.5	93.3
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W3 2 - 4 12/20/01 SW9-09-W3-S(2-4)	SW9-09-W3 4 - 6 02/12/02 SW9-09W3-4-6	SW9-09-W3 6 - 8 02/12/02 SW9-09W3-6-8	SW9-09-W3 8 - 10 02/12/02 SW9-09W3-8-10	SW9-09-W3 10 - 12 02/12/02 SW9-09W3-10-12	SW9-09-W3N1 0.5 - 2 01/17/02 SW9-09W3N1-0-2	SW9-09-W3N1 2 - 4 02/14/02 SW9-09W3N1-2-4	SW9-09-W3N1 4 - 6 02/14/02 SW9-09W3N1-4-6	SW9-09-W3N1 6 - 8 02/14/02 SW9-09W3N1-6-8	SW9-09-W3N1 8 - 10 02/14/02 SW9-09W3N1-8-10	SW9-09-W3N1 10 - 12 02/14/02 SW9-09W3N1-10-12	SW9-09-W3N2 0.5 - 2 02/18/02 SW9-09W3N2-0-2
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.7	91.0	91.6	90.3	86.7	90.8	93.1	90.5	91.3	85.7	92.0	92.0
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W3N2 2 - 4 02/18/02 SW9-09W3N2-2-4	SW9-09-W3N2 4 - 6 02/18/02 SW9-09W3N2-4-6	SW9-09-W3N2 6 - 8 02/18/02 SW9-09W3N2-6-8	SW9-09-W3S1 0 - 2 01/17/02 SW9-09W3S1-0-2	SW9-09-W3S1 2 - 4 01/17/02 SW9-09W3S1-2-4	SW9-09-W3S1 4 - 6 01/17/02 SW9-09W3S1-4-6	SW9-09-W3S1 6 - 8 01/17/02 SW9-09W3S1-6-8	SW9-09-W3S1 8 - 10 01/17/02 SW9-09W3S1-(8-10)	SW9-09-W3S2 0 - 2 01/17/02 SW9-09W3S2-0-2	SW9-09-W3S2 2 - 4 01/17/02 SW9-09W3S2-(2-4)	SW9-09-W3S2 4 - 6 01/17/02 SW9-09W3S2-(4-6)	SW9-09-W3S2 6 - 8 02/04/02 SW9-09W3S2-6-8
Detected Solids																							
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	91.5	90.1	91.1	94.0	91.8	92.2	91.4	91.1	90.9	89.0	90.2	89.2
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	SW9-09-W3S2 8 - 10 02/04/02 SW9-09W3S2-8-10	SW9-09-W3S2 10 - 12 02/04/02 SW9-09W3S2-10-12	SW9-09-W3S2 12 - 14 02/04/02 SW9-09W3S2-12-14	SW9-10 0 - 2 06/27/01 SW9-10-S(0-2)062701	SW9-11 0 - 2 01/03/02 SW9-11-S(0-2)	SW9-12 0 - 2 01/03/02 SW9-12-S(0-2)	SW9-13 0 - 2 01/03/02 SW9-13-S(0-2)
Detected Solids																		
Percent Moisture	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA
Total Solids	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	89.4	89.3	89.7	96.4	87.9	86.7 [86.8]	88.4
Total solids (residue)	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	%	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 Misc. Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C01 11 - 11.5 03/02/05 AOIW9-C01-S-030205DL	AOIW9-C02 4 - 4.5 03/02/05 AOIW9-C02-S-030205DL	AOIW9-C03 2 - 2.5 03/02/05 AOIW9-C03-S-030205DL	AOIW9-C04 11 - 11.5 03/02/05 AOIW9-C04-S-030205DL	AOIW9-C05 2 - 2.5 03/02/05 AOIW9-C05-S-030205DL	AOIW9-C06 2 - 2.5 03/02/05 AOIW9-C06-S-030205DL	AOIW9-C06 4 - 4.5 03/11/05 AOIW9-C06-S-031105	AOIW9-C07 2 - 2.5 03/02/05 AOIW9-C07-S-030205DL	AOIW9-C08 2 - 2.5 03/02/05 AOIW9-C08-S-030205DL
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	2.1 U	0.42 U	4.1 U	2 U	3.8 U	0.036 U	0.17 U	0.36 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	2.1 U	0.42 U	4.1 U	2 U	3.8 U	0.036 U	0.17 U	0.36 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	7.3	2.1 U	0.42 U	17	2 U	3.8 U	0.036 U	0.17 U	0.36 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	5.6	2.2	4.1 U	5.5	16	0.011 J	0.67	1.5
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	2.1 U	0.42 U	4.1 U	2 U	3.8 U	0.036 U	0.17 U	0.36 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	2.1 U	0.42 U	4.1 U	2 U	3.8 U	0.036 U	0.17 U	0.36 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	7.3	5.6	2.2	17*	5.5	16*	0.011 J	0.67	1.5

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C09 2 - 2.5 03/02/05 AOIW9-C09-S-030205DL	AOIW9-C10 2 - 2.5 03/02/05 AOIW9-C10-S-030205DL	AOIW9-C11 2 - 2.5 03/02/05 AOIW9-C11-S-030205DL	AOIW9-C12 2 - 2.5 03/02/05 AOIW9-C12-S-030205DL	AOIW9-C13 2 - 2.5 03/02/05 AOIW9-C13-S-030205DL	AOIW9-C13 4 - 4.5 03/11/05 A0IW9-C13-S-031105DL	AOIW9-C14 2 - 2.5 03/02/05 AOIW9-C14-S-030205DL	AOIW9-C14 4 - 4.5 03/11/05 A0IW9-C14-S-031105DL	AOIW9-C15 2 - 2.5 03/11/05 A0IW9-C15-S-031105DL
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	1.8 U	1.8 U	1.9 U	3.8 U	0.36 U	20 U	0.18 U	0.7 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	1.8 U	1.8 U	1.9 U	3.8 U	0.36 U	20 U	0.18 U	0.7 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	1.8 U	1.8 U	1.9 U	3.8 U	0.36 U	20 U	0.18 U	0.7 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.2	6.1	4.8	8.2	20	1.4 J	61	0.49	3.8
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	1.8 U	1.8 U	1.9 U	3.8 U	0.36 U	20 U	0.18 U	0.7 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	1.8 U	1.8 U	1.9 U	3.8 U	0.36 U	20 U	0.18 U	0.7 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	3.2	6.1	4.8	8.2	20*	1.4 J	61*	0.49	3.8

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C16 2 - 2.5 03/11/05 A0IW9-C16-S-031105DL	AOIW9-C17 2 - 2.5 03/11/05 A0IW9-C17-S-031105DL	AOIW9-C17 4 - 4.5 04/19/05 AOIW9-C17-S-041905DL	AOIW9-C18 2 - 2.5 03/11/05 A0IW9-C18-S-031105DL	AOIW9-C19 2 - 2.5 03/11/05 A0IW9-C19-S-031105DL	AOIW9-C19 4 - 4.25 05/11/05 AOIW9-C19-S-051105	AOIW9-C19 4 - 4.5 04/19/05 AOIW9-C19-S-041905DL	AOIW9-C20 2 - 2.5 03/11/05 A0IW9-C20-S-031105DL	AOIW9-C21 2 - 2.5 03/11/05 A0IW9-C21-S-031105DL
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.78 U	1.8 U	0.34 U	1.9 U	3.7 U	0.038 U	1.7 U	1.8 U	7.7 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.78 U	1.8 U	0.34 U	1.9 U	3.7 U	0.038 U	1.7 U	1.8 U	7.7 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.78 U	1.8 U	0.34 U	1.9 U	3.7 U	0.038 U	1.7 U	1.8 U	7.7 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	3.8	12	2.1	7.9	21	0.29	11	8	53
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.78 U	1.8 U	0.34 U	1.9 U	3.7 U	0.038 U	1.7 U	1.8 U	7.7 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.78 U	1.8 U	0.34 U	1.9 U	3.7 U	0.038 U	1.7 U	1.8 U	7.7 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	3.8	12	2.1	7.9	21*	0.29	11	8	53*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C21 4 - 4.5 04/19/05 AOIW9-C21-S-041905	AOIW9-C22 2 - 2.5 03/11/05 A0IW9-C22-S-031105DL	AOIW9-C22 4 - 4.5 04/19/05 AOIW9-C22-S-041905DL	AOIW9-C23 2 - 2.3 05/09/05 AOIW9-C23-S-050905DL	AOIW9-C23 4 - 4.25 05/11/05 AOIW9-C23-S-051105DL	AOIW9-C24 4 - 4.25 05/11/05 AOIW9-C24-S-051105DL	AOIW9-C25 4 - 4.25 05/11/05 AOIW9-C25-S-051105	AOIW9-C26 4 - 4.25 05/11/05 AOIW9-C26-S-051105DL	AOIW9-C27 4 - 4.25 05/11/05 AOIW9-C27-S-051105
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	3.7 U	0.069 U	6.8 U	0.072 U	0.071 U	0.036 U	0.072 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	3.7 U	0.069 U	6.8 U	0.072 U	0.071 U	0.036 U	0.072 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	3.7 U	0.069 U	6.8 U	0.072 U	0.071 U	0.036 U	0.072 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	33	0.37	25	0.9	0.8	0.13	0.95	0.094
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.046	3.7 U	0.069 U	6.8 U	0.072 U	0.071 U	0.036 U	0.072 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	3.7 U	0.069 U	6.8 U	0.072 U	0.071 U	0.036 U	0.072 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.046	33*	0.37	25*	0.9	0.8	0.13	0.95	0.094

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SQ)	MDEQ 2013 UPDATED CSAT	AOIW9-C28 4 - 4.25 05/11/05 AOIW9-C28-S-051105	AOIW9-C29 4 - 4.25 05/11/05 AOIW9-C29-S-051105	AOIW9-C30 4 - 4.25 05/11/05 AOIW9-C30-S-051105	AOIW9-C31 4 - 4.5 05/19/05 AOIW9-C31-S-051905DL	AOIW9-C32 2 - 2.3 05/09/05 AOIW9-C32-S-050905DL	AOIW9-C32 4 - 4.5 05/19/05 AOIW9-C32-S-051905DL	AOIW9-C33 4 - 4.5 05/19/05 AOIW9-C33-S-051905DL	AOIW9-C34 2 - 2.3 05/09/05 AOIW9-C34-S-050905DL	AOIW9-C35 2 - 2.3 05/09/05 AOIW9-C35-S-050905DL
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	0.037 U	0.073 U	19 U	0.36 U	0.073 U	1.7 U	15 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	0.037 U	0.073 U	19 U	0.36 U	0.073 U	1.7 U	15 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	0.037 U	0.073 U	19 U	0.36 U	0.073 U	1.7 U	15 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038	0.053	0.33	1.4	170	5.7	1	9	240
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	0.037 U	0.073 U	19 U	0.36 U	0.073 U	1.7 U	15 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	0.037 U	0.073 U	19 U	0.36 U	0.073 U	1.7 U	15 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038	0.053	0.33	1.4	170*	5.7	1	9	240*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C35 4 - 4.25 05/11/05 AOIW9-C35-S-051105	AOIW9-C36 4 - 4.25 05/11/05 AOIW9-C36-S-051105	AOIW9-C37 4 - 4.5 05/19/05 AOIW9-C37-S-051905	AOIW9-C38 4 - 4.25 05/11/05 AOIW9-C38-S-051105R2	AOIW9-C39 2 - 2.3 05/09/05 AOIW9-C39-S-050905DL	AOIW9-C39 4 - 4.25 05/11/05 AOIW9-C39-S-051105	AOIW9-C40 4 - 4.25 05/11/05 AOIW9-C40-S-051105	AOIW9-C41 4 - 4.25 05/11/05 AOIW9-C41-S-051105	AOIW9-C42 4 - 4.25 05/11/05 AOIW9-C42-S-051105DL
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.037 U	0.038 UJ	15 U	0.038 U	0.037 U	0.037 U	0.18 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.037 U	0.038 UJ	15 U	0.038 U	0.037 U	0.037 U	0.18 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.037 U	0.038 UJ	15 U	0.038 U	0.037 U	0.037 U	0.18 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.47	0.45	0.14	0.038 UJ	170	0.32	0.21	0.46	1.7 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.037 U	0.038 UJ	15 U	0.038 U	0.037 U	0.037 U	0.18 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.037 U	0.038 UJ	15 U	0.038 U	0.037 U	0.037 U	0.18 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.47	0.45	0.14	0.038 U	170*	0.32	0.21	0.46	1.7 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C43 4 - 4.25 05/11/05 AOIW9-C43-S-051105DL	AOIW9-C44 4 - 4.25 05/11/05 AOIW9-C44-S-051105	AOIW9-C45 4 - 4.25 05/11/05 AOIW9-C45-S-051105	AOIW9-C46 4 - 4.25 05/11/05 AOIW9-C46-S-051105DL	AOIW9-C47 4 - 4.5 05/19/05 AOIW9-C47-S-051905DL	AOIW9-C48 4 - 4.25 05/11/05 AOIW9-C48-S-051105DL	AOIW9-C49 4 - 4.25 05/11/05 AOIW9-C49-S-051105	AOIW9-C50 4 - 4.25 05/11/05 AOIW9-C50-S-051105	AOIW9-C51 2 - 2.3 06/07/05 AOIW9-C51-S-060705
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.17 U	0.037 U	0.038 U	0.19 U	0.36 U	0.075 U	0.037 U	0.038 U	0.038 UJ
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.17 U	0.037 U	0.038 U	0.19 U	0.36 U	0.075 U	0.037 U	0.038 U	0.038 UJ
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.17 U	0.037 U	0.038 U	0.19 U	0.36 U	0.075 U	0.037 U	0.038 U	0.026 J
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.5	0.052	0.097	1.4	3.7	1.1	0.63	0.038 U	0.038 UJ
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.17 U	0.037 U	0.038 U	0.19 U	0.36 U	0.075 U	0.037 U	0.038 U	0.038 UJ
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.17 U	0.037 U	0.038 U	0.19 U	0.36 U	0.075 U	0.037 U	0.038 U	0.038 UJ
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	1.5	0.052	0.097	1.4	3.7	1.1	0.63	0.038 U	0.026 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-C52 2 - 2.3 06/07/05 AOIW9-C52-S-060705	AOIW9-C53 2 - 3 06/07/05 AOIW9-C53-060705DL	AOIW9-C54 2 - 3 06/08/05 AOIW9-C54-060805DL	AOIW9-C55 2 - 3 06/08/05 AOIW9-C55-060805	AOIW9-C56 2 - 3 06/08/05 AOIW9-C56-060805DL	AOIW9-C57 2 - 3 06/08/05 AOIW9-C57-060805	AOIW9-C58 2 - 3 06/08/05 AOIW9-C58-060805	AOIW9-C59 2 - 3 06/08/05 AOIW9-C59-060805	AOIW9-C60 2 - 3 06/08/05 AOIW9-C60-060805	AOIW9-CSW 0 - 4 05/19/05 AOIW9-CSW7-S-051905
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.18 U	0.075 U	0.037 U	0.071 U	0.038 U	0.038 U [0.038 U]	0.037 U	0.038 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.18 U	0.075 U	0.037 U	0.071 U	0.038 U	0.038 U [0.038 U]	0.037 U	0.038 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.13	0.18 U	0.075 U	0.037 U	0.071 U	0.038 U	0.038 U [0.038 U]	0.037 U	0.038 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	1.6	0.84 B	0.39 B	1.1 B	0.12 B	0.69 J [0.038 U]	0.24 B	0.064 B	0.31 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.18 U	0.075 U	0.037 U	0.071 U	0.038 U	0.038 U [0.038 U]	0.037 U	0.038 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.064 J	0.039 J	0.02 J	0.042 J	0.038 U	0.03 J [0.038 U]	0.013 J	0.038 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.13	1.664 J	0.879 J	0.41 J	1.142 J	0.12	0.72 J [0.038 U]	0.253 J	0.064	0.31 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-CSW2 0 - 4 05/11/05 AOIW9-CSW2-S-051105DL	AOIW9-CSW3 0 - 4 05/11/05 AOIW9-CSW3-S-051105DL	AOIW9-CSW4 0 - 4 05/11/05 AOIW9-CSW4-S-051105DL	AOIW9-CSW5 0 - 4 05/11/05 AOIW9-CSW5-S-051105DL	AOIW9-CSW6 0 - 4 05/11/05 AOIW9-CSW6-S-051105	AOIW9-CSW7 0 - 4 05/11/05 AOIW9-CSW7-S-051105DL	AOIW9-CSW8 0 - 4 05/11/05 AOIW9-CSW8-S-051105	AOIW9-CSW9 0 - 2 06/07/05 AOIW9-CSW9-S-060705
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.38 U	0.074 U	0.18 U	0.036 U	1.4 U	0.035 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.38 U	0.074 U	0.18 U	0.036 U	1.4 U	0.035 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.38 U	0.074 U	0.18 U	0.036 U	1.4 U	0.035 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	27	7.1	0.76	1.5	0.35	15	0.67	0.0074 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.38 U	0.074 U	0.18 U	0.036 U	1.4 U	0.035 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	1.8 U	0.38 U	0.074 U	0.18 U	0.036 U	1.4 U	0.035 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	27*	7.1	0.76	1.5	0.35	15	0.67	0.0074 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-CSW10 0 - 2 06/07/05 AOIW9-CSW10-S-060705	AOIW9-CSW11 0 - 2 06/07/05 AOIW9-CSW11-S-060705	AOIW9-CSW12 0 - 2 06/07/05 AOIW9-CSW12-S-060705	AOIW9-CSW13 0 - 3 06/08/05 AOIW9-CSW13-060805	AOIW9-CSW14 0 - 3 06/08/05 AOIW9-CSW14-060805	AOIW9-CSW15 0 - 2 06/07/05 AOIW9-CSW15-S-060705	AOIW9-CSW16 0 - 3 06/08/05 AOIW9-CSW16-060805	AOIW9-CSW17 0 - 3 06/08/05 AOIW9-CSW17-060805	AOIW9-UCNW 1 - 2 06/03/05 AOIW9-UCNW-S-060305DL
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U [0.037 UJ]	0.037 U	0.038 U	0.036 U	0.036 U	0.038 U	0.038 U	37 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U [0.037 UJ]	0.037 U	0.038 U	0.036 U	0.036 U	0.038 U	0.038 U	37 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U [0.037 UJ]	0.037 U	0.038 U	0.036 U	0.036 U	0.038 U	0.038 U	37 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.016 J	0.026 J [0.015 J]	0.016 J	0.1 B	0.42 B	0.21	0.22 B	0.51 B	490
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U [0.037 UJ]	0.037 U	0.038 U	0.036 U	0.036 U	0.038 U	0.038 U	37 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U [0.037 UJ]	0.037 U	0.0093 J	0.018 J	0.022 J	0.014 J	0.026 J	37 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.016 J	0.026 J [0.015 J]	0.016 J	0.1093 J	0.438 J	0.232 J	0.234 J	0.536 J	490*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	AOIW9-V001 11 - 11.5 03/02/05 AOIW9-V001-S-030205DL	AOIW9-V002 2 - 2.5 03/02/05 AOIW9-V002-S-030205DL	AOIW9-V002 4 - 4.5 03/11/05 A0IW9-V002-S-031105DL	AOIW9-V003 2 - 2.5 03/02/05 AOIW9-V003-S-030205DL	AOIW9-V003 4 - 4.5 03/11/05 A0IW9-V003-S-031105DL	AOIW9-V003 6 - 6.5 04/19/05 AOIW9-V003-S-041905DL	BCC-32 0.6 - 2.6 08/11/04 BCC-32B-S(0.6-2.6)081104	BCC-33 0.8 - 2.8 08/10/04 BCC-33B-S(0.8-2.8)081004	BCC-34 0.7 - 2 06/02/04 BCC-34-S(1-2)
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 U	3.6 U	0.074 U	4 U	1.9 U	0.36 U	0.036 U	0.034 U	R
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 U	3.6 U	0.074 U	4 U	1.9 U	0.36 U	0.036 U	0.034 U	R
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	7.6	3.6 U	0.074 U	4 U	1.9 U	0.36 U	0.036 U	0.034 U	R
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 U	37	0.37	26	11	2	0.036 U	0.034 U	R
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 U	3.6 U	0.074 U	4 U	1.9 U	0.36 U	0.036 U	0.034 U	R
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2 U	3.6 U	0.074 U	4 U	1.9 U	0.36 U	0.036 U	0.034 U	R
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	7.6	37*	0.37	26*	11	2	0.036 U	0.034 U	R

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-34-2 0.5 - 2.5 07/27/04 BCC342S0.5-2.5	BCC-35 0.8 - 2.8 08/10/04 BCC-35B-S-(0.8-2.8)081004	BCC-36 0.5 - 2.5 08/10/04 BCC-36B-S-(0.5-2.5)081004	BCC-41 0.5 - 1.5 08/11/04 BCC-41B-S(0.5-1.5)081104	BCC-41 0.5 - 2.5 08/06/04 BCC-41B-S(0.5-2.5)080604R2	BCC-43 0.6 - 2.6 08/11/04 BCC-43B-S(0.6-2.6)081104	BCC-44 0.7 - 2 06/01/04 BCC-44-S(1-2)	BCC-45 0.66 - 2.66 08/11/04 BCC-45B-S(0.66-2.66)081104
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 U	R	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 U	R	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 UJ	R	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 UJ	R	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 UJ	R	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 UJ	R	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.037 U	0.043 U	0.037 U	0.037 U	0.035 U	R	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-46 0.33 - 2.33 08/11/04 BCC-46B-S(0.33-2.33)081104	BCC-51 0.7 - 2 06/03/04 BCC-51-S(1-2)	BCC-51 6 - 8 06/03/04 BCC-51-S(6-8)	BCC-52 0 - 2 06/03/04 BCC-52-S(0-2)	BCC-52 6 - 8 06/03/04 BCC-52-S(6-8)	BCC-53 0 - 2 06/03/04 BCC-53-S(0-2)	BCC-53 6 - 8 06/03/04 BCC-53-S(6-8)DL	BCC-53 9 - 10 08/04/04 BCC-53B-S(9-10)080404	BCC-53-1 0 - 2 08/03/04 BCC-53-1-S(0-2)DL	BCC-53-1 7 - 8 08/03/04 BCC-53-1-S(7-8)DL	BCC-53-2 0 - 2 08/04/04 BCC-53-2-S(0-2)080404
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 U	0.04 U	0.035 U	0.038 U	0.037 U	0.036 U	3.9 U	0.037 U	0.073 U	0.19 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 U	0.04 U	0.035 U	0.038 U	0.037 U	0.036 U	3.9 U	0.037 U	0.073 U	0.19 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 UJ	0.04 U	0.035 U	0.038 U	0.037 U	0.036 U	16	0.07	0.073 U	0.19 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 UJ	0.035 J	0.035 U	0.038 U	0.037 U	0.12	3.9 U	0.037 U	0.073 U	0.19 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 UJ	0.04 U	0.035 U	0.012 J	0.11	0.15	3.9 U	0.037 U	0.29	0.32	0.16
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.035 UJ	0.037 J	0.035 U	0.01 J	0.059	0.066	3.9 U	0.037 U	0.073 U	0.19 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.035 U	0.072 J	0.035 U	0.022 J	0.169	0.336	16*	0.07	0.29	0.32	0.16

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-53-2 7.5 - 8 08/04/04 BCC-53-2-S(7.5-8)080404	BCC-53-2 8 - 10 08/04/04 BCC-53-2-S(8-10)080404	BCC-53-3 0 - 1.33 08/04/04 BCC-53-3-S(0-1.33)080404DL	BCC-53-3 6 - 7.33 08/04/04 BCC-53-3-S(6-7.33)080404DL	BCC-53-4 0 - 2 08/03/04 BCC-53-4-S(0-2)	BCC-53-4 6 - 7.33 08/03/04 BCC-53-4-S(6-7.33)	BCC-54 0 - 2 06/03/04 BCC-54-S(0-2)	BCC-54 6 - 8 06/03/04 BCC-54-S(6-8)	BCC-55 0 - 2 06/03/04 BCC-55-S(0-2)	BCC-55 6 - 8 06/03/04 BCC-55-S(6-8)
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.036 U	0.19 U	0.072 U	0.036 U	0.037 U	0.037 U [0.037 U]	0.036 U	0.037 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.036 U	0.19 U	0.072 U	0.036 U	0.037 U	0.037 U [0.037 U]	0.036 U	0.037 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	R	0.19 U	0.072 U	0.036 U	0.037 U	0.037 U [0.037 U]	0.036 U	0.037 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	R	1.2	0.35	0.099	0.077	0.037 U [0.037 U]	0.036 U	0.065	0.93
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.11	0.098 J	0.19 U	0.072 U	0.036 U	0.037 U	0.018 J [0.04]	0.068	0.037 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	R	0.19 U	0.072 U	0.036 U	0.037 U	0.037 U [0.037 U]	0.036 U	0.56	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.11	0.098 J	1.2	0.35	0.099	0.077	0.018 J [0.04]	0.068	0.625	0.93

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-56 0.66 - 2.66 08/11/04 BCC-56B-S(0.66-2.66)081104	BCC-57 0.75 - 2.75 08/06/04 BCC-57B-S(0.75-2.75)080604R2	BCC-58 0.6 - 2 06/03/04 BCC-58-S(1-2)	BCC-58 6 - 8 06/03/04 BCC-58-S(6-8)	BCC-59 1.3 - 2.3 06/02/04 BCC-59-S(1-2)	BCC-59 6 - 8 06/02/04 BCC-59-S(6-8)	BCC-60 1.8 - 2.8 06/01/04 BCC-60-S(1-2)DL	BCC-60 6 - 8 06/01/04 BCC-60-S(6-8)	BCC-60-1 0.66 - 2.66 07/23/04 BCC-60-1-S(0.66-2.66)DL	BCC-60-1 2 - 4 07/26/04 BCC601S2-4DL	BCC-60-1 8 - 9 07/23/04 BCC-60-1-S(8-9)
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.037 U	0.036 U	0.036 U	0.038 U	0.038 U	1.9 U	0.037 U	0.077 U	3.7 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.037 U	0.036 U	0.036 U	0.038 U	0.038 U	1.9 U	0.037 U	0.077 U	3.7 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	R	0.036 U	0.036 U	0.038 U	0.038 U	1.9 U	0.037 U	0.077 U	3.7 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	R	0.036 U	0.036 U	0.038 U	0.038 U	17	0.041	0.39	27	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	R	0.018 J	0.036 U	0.038 U	0.038 U	1.9 U	0.037 U	0.077 U	3.7 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	R	0.01 J	0.036 U	0.038 U	0.038 U	1.9 U	0.037 U	0.077 U	3.7 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.04 U	0.037 U	0.028 J	0.036 U	0.038 U	0.038 U	17*	0.041	0.39	27*	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-60-2 1.25 - 3.25 07/23/04 BCC-60-2-S(1.25-3.25)	BCC-60-2 6 - 8 07/23/04 BCC-60-2(6-8)	BCC-60-2 8 - 9 07/23/04 BCC-60-2-S(8-9)	BCC-60-3 1.6 - 3.6 07/23/04 BCC-60-3-S(1.6-3.6)DL	BCC-60-3 6 - 8 07/23/04 BCC-60-3-S(6-8)	BCC-60-3 7 - 9 07/23/04 BCC-60-3-S(7-9)	BCC-60-4 0.66 - 2.66 07/23/04 BCC-60-4-S(0.66-2.66)DL	BCC-60-4 7 - 8 07/23/04 BCC-60-4-S(7-8)DL	BCC-60-4 8 - 9.5 07/23/04 BCC-60-4-S(8-9.5)	BCC-60-6 2.5 - 3.7 08/10/04 BCC-60-6-S(2.5-3.7)081004	BCC-60-6 6 - 8 08/10/04 BCC-60-6-S(6-8)081004
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.038 U	0.36 U	0.037 U	0.037 U	0.37 U	0.076 U	0.04 U [0.039 U]	0.038 U	0.039 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.038 U	0.36 U	0.037 U	0.037 U	0.37 U	0.076 U	0.04 U [0.039 U]	0.038 U	0.039 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.038 U	0.36 U	0.037 U	0.037 U	0.37 U	0.076 U	0.04 U [0.039 U]	0.038 U	0.039 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.058	0.038 U	2.6	0.012 J	0.037 U	3.3	0.76	0.044 [0.022 J]	0.038 U	0.039 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.038 U	0.36 U	0.037 U	0.037 U	0.37 U	0.076 U	0.04 U [0.039 U]	0.038 U	0.039 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.037 U	0.038 U	0.038 U	0.36 U	0.037 U	0.037 U	0.37 U	0.076 U	0.04 U [0.039 U]	0.038 U	0.039 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.037 U	0.058	0.038 U	2.6	0.012 J	0.037 U	3.3	0.76	0.044 [0.022 J]	0.038 U	0.039 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-60-6 11 - 11.33 08/10/04 BCC-60-6-S(11-11.33)081004	BCC-60-7 2.2 - 4.2 08/09/04 BCC-60-7-S(2.2-4.2)080904	BCC-60-7 4.2 - 4.9 08/09/04 BCC-60-7-S(4.2-4.9)080904	BCC-60-7 8.25 - 9.66 08/09/04 BCC-60-7-S(8.25-9.66)080904	BCC-60-8 1.1 - 2.1 08/09/04 BCC-60-8-S(1.1-2.1)080904DL	BCC-60-8 2 - 2.5 08/09/04 BCC-60-8-S(2-2.5)080904	BCC-60-8 5.2 - 7.2 08/09/04 BCC-60-8-S(5.2-7.2)080904	BCC-60-10 0.8 - 1.5 08/30/04 BCC-60-10(0.8-1.5)083004DL
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 U	0.038 U	0.037 U	18 U	0.038 U	0.038 U	7.9 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 U	0.038 U	0.037 U	18 U	0.038 U	0.038 U	7.9 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 UJ	0.038 U	0.037 U	18 U	0.038 U	0.038 U	7.9 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 UJ	0.19	0.091	180	0.035 J	0.083	7.9 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 UJ	0.038 U	0.037 U	18 U	0.038 U	0.038 U	7.9 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.035 UJ	0.038 U	0.037 U	18 U	0.038 U	0.038 U	7.9 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.04 U	0.035 U	0.19	0.091	180*	0.035 J	0.083	7.9 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BCC-60-11 2 - 4 08/30/04 BCC-60-11(2-4)	BCC-60-13 2 - 4 08/30/04 BCC-60-13(2-4)083004	BCC-61 0 - 2 06/01/04 BCC-61-S(0-2)	BCC-61 6 - 8 06/01/04 BCC-61-S(6-8)	BCC-62 0 - 2 06/03/04 BCC-62-S(0-2)	BCC-62 6 - 8 06/03/04 BCC-62-S(6-8)	BCC-63 0.66 - 1.66 08/11/04 BCC-63B-S(0.66-1.66)081104	BCC-69 0.85 - 2.85 08/06/04 BCC-69B-S(0.85-2.85)080604R2	BCC-72 0.66 - 1.66 08/11/04 BCC-72B-S(0.66-1.66)081104	BCC-75 0 - 2 06/03/04 BCC-75-S(0-2)	BCC-75 5 - 7 06/03/04 BCC-75-S(5-7)
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.037 U	0.037 U	0.038 U	0.035 U	0.035 U	0.036 U	0.035 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.037 U	0.037 U	0.038 U	0.035 U	0.035 U	0.036 U	0.035 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.037 U	0.037 U	0.038 U	0.035 U	0.035 U	0.036 U	0.035 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.012 J	0.037 U	0.037 U	0.017 J	0.038 U	0.035 U	0.035 U	0.036 U	0.18	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.14	0.18	0.048	0.049	0.035 U	0.035 U	0.036 U	0.077	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.038 U	0.037 U	0.037 U	0.037 U	0.038 U	0.035 U	0.013 J	0.036 U	0.031 J	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.012 J	0.14	0.18	0.065 J	0.049	0.035 U	0.013 J	0.036 U	0.288 J	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01 0 - 2 07/16/01 BW9-01-S(0-2)-N	BW9-01 8 - 10 07/16/01 BW9-01-S(8-10)-N	BW9-01B 10.5 - 11 07/21/04 BW901BS10.5-11DL	BW9-01-E1 2 - 3 07/22/04 BW901E1S2-3DL	BW9-01-E1 8 - 8.5 07/22/04 BW901E1S8-8.5DL	BW9-01-E2 2 - 4 07/29/04 BW901E2S2-4	BW9-01-E2 6 - 8 07/29/04 BW901E2S6-8DL	BW9-01-E2 8.2 - 9 08/09/04 BW9-01-E2-S(8.2-9)080904DL	BW9-01-E3 2 - 4 08/02/04 BW9-01-E3-S(2-4)-080204	BW9-01-E3 8 - 10 08/02/04 BW9-01-E3-S(8-10)-080204DL
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2.7	10	0.79 U	0.74 U	11 J	0.036 U	0.073 U	0.36 U	R	R
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.06 U	1.4 U	0.79 U	0.74 U	1.9 U	0.036 U	0.073 U	0.36 U	R	R
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.098 U	2.2 U	0.79 U	6.5	1.9 U	0.28	0.97	1	0.23 J	0.72 J
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.025 U	0.57 U	11	0.74 U	1.9 U	0.036 U	0.073 U	0.36 U	R	R
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.11 U	2.5 U	0.79 U	0.74 U	1.9 U	0.036 U	0.073 U	0.36 U	R	R
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.04 U	0.91 U	0.79 U	0.74 U	1.9 U	0.013 J	0.073 U	0.36 U	R	R
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	2.7	10	11	6.5	11 J	0.293 J	0.97	1	0.23 J	0.72 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-E3 10 - 12 08/02/04 BW9-01-E3-S(10-12)-080204	BW9-01-E3S7.5 0.75 - 2 12/21/04 BW9-01-E3S7.5-S(0.75-2)DL	BW9-01-E3S7.5 2 - 3 12/21/04 BW9-01-E3S7.5-S(2-3)	BW9-01-E3S9 0.75 - 2 12/21/04 BW9-01-E3S9-S(0.75-2)DL	BW9-01-E3S9 2 - 4 12/21/04 BW9-01-E3S9-S(2-4)	BW9-01-E4.5S5.5 2.5 - 4 12/21/04 BW9-01-E4.5S5.5-S(2.5-4)DL	BW9-01-E4.5S7.5 2.5 - 4 12/21/04 BW9-01-E4.5S7.5-S(2.5-4)	BW9-01-E4.5S7.5 5 - 7 12/21/04 BW9-01-E4.5S7.5-S(5-7)	BW9-01-N1 2 - 3 07/23/04 BW9-01-N1-S(2-3)
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	3.8 U	0.037 U	0.19 U	0.037 U	1.9 U	0.037 U	0.041 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	3.8 U	0.037 U	0.19 U	0.037 U	1.9 U	0.037 U	0.041 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.43 J	3.8 U	0.037 U	0.19 U	0.037 U	1.9 U	0.037 U	0.041 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	37	0.014 J	2	0.0098 J	9.4	0.037 U	0.041 U	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	3.8 U	0.037 U	0.19 U	0.037 U	1.9 U	0.037 U	0.041 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	3.8 U	0.037 U	0.19 U	0.037 U	1.9 U	0.037 U	0.041 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.43 J	37*	0.014 J	2	0.0098 J	9.4	0.037 U	0.041 U	0.036 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-N1 5 - 6 07/23/04 BW9-01-N1-S(5-6)DL	BW9-01-N1E1 2 - 2.5 07/22/04 BW901N1E1S2-2.5DL	BW9-01-N1E1 7 - 8 07/22/04 BW901N1E1S7-8	BW9-01-N1E1 8 - 10 07/22/04 BW901N1E1S8-10	BW9-01-N1W1 3 - 4 07/22/04 BW901N1W1S3-4	BW9-01-N1W1 7 - 8 07/22/04 BW901N1W1S7-8	BW9-01-N1W1 11.5 - 12 07/22/04 BW901N1W1S11.5-12	BW9-01-S1 2 - 2.25 07/22/04 BW901S1S2-2.25DL	BW9-01-S1 6.5 - 8 07/22/04 BW901S1S6.5-8DL	BW9-01-S1 8 - 10 07/22/04 BW901S1S8-10DL	BW9-01-S1 10 - 10.25 07/22/04 BW901S1S10-10.25DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.37 U	0.036 U	0.036 U	0.037 U	0.037 U	0.039 U	0.37 U	0.4 U	0.75 U	0.38 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.37 U	0.036 U	0.036 U	0.037 U	0.037 U	0.039 U	0.37 U	0.4 U	0.75 U	0.38 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.37 U	0.036 U	0.036 U	0.037 U	0.037 U	0.039 U	4.7	3.3	5	4
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.83	0.37 U	0.14	0.036 U	0.25	0.075	0.039 U	0.37 U	0.4 U	0.75 U	0.38 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.37 U	0.036 U	0.036 U	0.037 U	0.037 U	0.039 U	0.37 U	0.4 U	0.75 U	0.38 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.37 U	0.036 U	0.036 U	0.037 U	0.037 U	0.039 U	0.39 J	0.4 U	0.75 U	0.38 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.83	0.37 U	0.14	0.036 U	0.25	0.075	0.039 U	5.09 J	3.3	5	4

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-S1 14.5 - 15 07/22/04 BW901S1S14.5-15DL	BW9-01-S1E1 2 - 3 07/22/04 BW901S1E1S2-3DL	BW9-01-S1E1 8.5 - 9 07/22/04 BW901S1E1S8.5-9DL	BW9-01-S1E2 2 - 4 08/09/04 BW9-01-S1E2-S(2-4)080904DL	BW9-01-S1E2 8 - 9 08/09/04 BW9-01-S1E2-S(8-9)080904DL	BW9-01-S1E2 10 - 11 08/09/04 BW9-01-S1E2-S(10-11)080904DL	BW9-01-S1E3 2 - 4 08/03/04 BW9-01-S1E3-S(2-4)DL	BW9-01-S1E3 6.5 - 8 08/03/04 BW9-01-S1E3-S(6.5-8)DL
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	0.77 U	7.8 J	0.38 U	0.72 U	37 U	0.38 U	0.38 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	0.77 U	1.8 U	0.38 U	0.72 U	37 U	0.38 U	0.38 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.7	7	1.8 U	3.2	7.2	37 U	2.7	4.2
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	0.77 U	1.8 U	0.38 U	0.72 U	37 U	0.38 U	0.38 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	0.77 U	1.8 U	0.38 U	0.72 U	330	0.38 U	0.38 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.26 J	0.23 J	1.8 U	0.38 U	0.72 U	37 U	0.38 U	0.38 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	1.96 J	7.23 J	7.8 J	3.2	7.2	330*	2.7	4.2

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-S1E3 8 - 10 08/03/04 BW9-01-S1E3-S(8-10)DL	BW9-01-S1E3 10 - 12 08/03/04 BW9-01-S1E3-S(10-12)DL	BW9-01-S1E4 8 - 8.5 08/30/04 BW9-01-S1E4(8-8.5)083004DL	BW9-01-S1E4 10 - 12 08/30/04 BW9-01-S1E4(10-12)083004DL	BW9-01-S1W1 2 - 3.5 07/23/04 BW9-01-S1W1-S(2-3.5)DL	BW9-01-S1W1 7 - 8 07/23/04 BW9-01-S1W1-S(7-8)DL	BW9-01-S1W1 8 - 10 07/23/04 BW9-01-S1W1-S(8-10)DL	BW9-01-S2 2 - 4 08/02/04 BW9-01-S2-S(2-4)080204
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.9 U	1.9 U	0.76 U	0.18 U	0.36 U	0.36 U	0.38 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.9 U	1.9 U	0.76 U	0.18 U	0.36 U	0.36 U	0.38 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	19	9.1	0.76 U	0.18 U	2.4	1.9	2.5	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.9 U	1.9 U	10	1.5	0.36 U	0.36 U	0.38 U	0.01 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.9 U	1.9 U	0.76 U	0.18 U	0.36 U	0.36 U	0.38 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.9 U	1.9 U	0.76 U	0.18 U	0.36 U	0.36 U	0.38 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	19*	9.1	10	1.5	2.4	1.9	2.5	0.01 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-S2 8 - 10 08/02/04 BW9-01-ES2-S(8-10)080204	BW9-01-S2 10 - 11 08/02/04 BW9-01-S2-S(10-11)080204DL	BW9-01-S2E1 6 - 8 08/30/04 BW9-01-S2E1(6-8)	BW9-01-S2E2 10 - 12 08/30/04 BW9-01-S2E2(10-12)DL	BW9-01-S2E3 0.6 - 1.2 08/30/04 BW9-01-S2E3(0.6-1.2)DL	BW9-01-S2E3 10 - 12 08/30/04 BW9-01-S2E3(10-12)	BW9-01-S2W1 2 - 4 08/02/04 DUP-099-080204	BW9-01-W1 2 - 4 07/21/04 BW901W1S2-4DL	BW9-01-W1 7 - 9 07/22/04 BW901W1S7-9DL	BW9-01-W2 2 - 4 07/29/04 BW901W2S2-4DL
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.073 U	0.037 U	0.19 U	3.8 U	0.036 U	0.038 U	0.35 U	2 U	0.39 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.073 U	0.037 U	0.19 U	3.8 U	0.036 U	0.038 U	0.35 U	2 U	0.39 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	0.073 UJ	0.037 U	0.19 U	3.8 U	0.036 U	R	2.4	2 U	3.9
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	0.27 J	0.037 U	0.7	24	0.036 U	0.15 J	0.35 U	21	0.39 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	0.073 UJ	0.037 U	0.19 U	3.8 U	0.036 U	R	0.35 U	2 U	0.39 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	R	0.073 UJ	0.037 U	0.19 U	3.8 U	0.036 U	R	0.35 U	2 U	0.39 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.27 J	0.037 U	0.7	24*	0.036 U	0.15 J	2.4	21*	3.9

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-01-W2 7 - 8 07/29/04 BW901W2S7-8DL	BW9-01-W2 10 - 12 07/29/04 BW901W2S10-12DL	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)DL	BW9-02 2 - 4 12/17/01 BW9-02-S(2-4)	BW9-02 8 - 10 07/17/01 BW9-02-S(8-10)	BW9-02-E1 0.4 - 2 12/17/01 BW9-02-E1-S(0-2)DL	BW9-02-E1N1 2 - 4 01/02/02 BW9-02E1N1-2-4DL	BW9-02-E1N2 0.5 - 2 01/02/02 BW9-02E1N2-0-2DL	BW9-02-E1S1 2 - 4 01/02/02 BW9-02E1S1-2-4	BW9-02-E1S2 0.5 - 2 01/02/02 BW9-02E1S2-0-2DL	BW9-02-E1S2 2 - 4 01/30/02 BW9-02-E1S2(2-4)	BW9-02-E1S3 2 - 4 01/02/02 BW9-02E1S3-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.36 U	3.6 U	0.036 U	0.035 U	0.19 U	0.83 U	0.21 U	0.036 U	19 U	0.038 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.36 U	3.6 U	0.036 U	0.035 U	0.19 U	0.83 U	0.21 U	0.036 U	19 U	0.038 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.6	1.7	3.6 U	0.036 U	0.035 U	0.19 U	0.83 U	0.21 U	0.036 U	19 U	0.038 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.36 U	44	0.026 J	0.035 U	1.5	5.3	0.91	0.036 U	180	0.038 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.36 U	3.6 U	0.036 U	0.035 U	0.19 U	0.83 U	0.21 U	0.036 U	19 U	0.038 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.37 U	0.36 U	3.6 U	0.036 U	0.035 U	0.19 U	0.83 UJ	0.05 J	0.036 UJ	19 UJ	0.038 U	0.038 UJ
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	1.6	1.7	44*	0.026 J	0.035 U	1.5	5.3	0.96 J	0.036 U	180*	0.038 U	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E1S4 0.5 - 2 01/02/02 BW9-02E1S4-0-2	BW9-02-E1S9 2 - 4 02/27/02 BW9-02E1S9-2-4	BW9-02-E1S25 0.5 - 2 03/01/02 BW9-02E1S25-0-2	BW9-02-E2S1 0.5 - 2 01/11/02 BW9-02E2S1-0-2-N	BW9-02-E2S2 0.5 - 2 01/30/02 BW9-02-E2S2(0-2)DL	BW9-02-E2S2 2 - 4 01/30/02 BW9-02E2S2-2-4	BW9-02-E2S3 0.9 - 2 01/11/02 BW9-02E2S3-0-2-N	BW9-02-E3N1 0.9 - 2 02/11/02 BW9-02E3N1-0-2DL	BW9-02-E3S1 2 - 4 02/06/02 BW9-02E3S1-2-4	BW9-02-E3S2 2 - 4 02/04/02 BW9-02E3S2-2-4	BW9-02-E3S3 2 - 4 02/06/02 BW9-02E3S3-2-4	BW9-02-E3S5 0.5 - 2 02/11/02 BW9-02E3S5-0-2DL
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 UJ	0.037 U	0.039 U	0.029 U	1.9 U	0.037 U	0.059 U	0.19 U	0.038 U	0.037 U	0.038 U	0.37 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 UJ	0.037 U	0.039 U	0.061 U	1.9 U	0.037 U	0.12 U	0.19 U	0.038 U	0.037 U	0.038 U	0.37 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 UJ	0.037 U	0.039 U	0.1 U	1.9 U	0.037 U	0.2 U	0.19 U	0.038 U	0.037 U	0.038 U	0.37 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.051 J	0.037 U	0.049	1.5	13	0.037 U	2.7	1.5	0.038 U	0.037 U	0.038 U	3.3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 UJ	0.037 U	0.039 U	0.11 U	1.9 U	0.037 U	0.22 U	0.19 U	0.038 U	0.037 U	0.038 U	0.37 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 UJ	0.037 U	0.039 U	0.081 J	1.9 U	0.037 U	0.1 J	0.067 J	0.038 U	0.037 U	0.038 U	0.37 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.051 J	0.037 U	0.049	1.581 J	13	0.037 U	2.8 J	1.567 J	0.038 U	0.037 U	0.038 U	3.3

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E3S7 0.5 - 2 02/20/02 BW9-02E3S7-0-2	BW9-02-E3S9 2 - 4 02/26/02 BW9-02E3S9-2-4	BW9-02-E3S11 0.5 - 2 02/26/02 BW9-02E3S11-0-2DL	BW9-02-E3S13 2 - 4 02/26/02 BW9-02E3S13-2-4DL	BW9-02-E4 0 - 2 02/11/02 BW9-02E4-0-2DL	BW9-02-E4S2 2 - 4 02/06/02 BW9-02E4S2-2-4	BW9-02-E4S4 0.5 - 2 02/11/02 BW9-02E4S4-0-2	BW9-02-E4S25 0.5 - 2 03/01/02 BW9-02E4S25-0-2	BW9-02-E5S1 0.5 - 2 02/11/02 BW9-02E5S1-0-2	BW9-02-E5S3 2 - 4 02/11/02 BW9-02E5S3-2-4	BW9-02-E5S5 2 - 4 02/14/02 BW9-02E5S5-2-4	BW9-02-E5S7 2 - 4 02/14/02 BW9-02E5S7-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.038 U	0.2 U	0.072 U	0.38 U	0.037 U	0.038 U	0.037 U	0.037 U	0.038 U	0.037 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.038 U	0.2 U	0.072 U	0.38 U	0.037 U	0.038 U	0.037 U	0.037 U	0.038 U	0.037 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.038 U	0.2 U	0.072 U	2.6	0.037 U	0.038 U	0.037 U	0.037 U	0.038 U	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.11	0.038 U	1.6	0.68	0.38 U	0.037 U	0.19	0.012 J	0.41	0.0085 J	0.037 U	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.038 U	0.2 U	0.072 U	0.38 U	0.037 U	0.038 U	0.037 U	0.037 U	0.038 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.038 U	0.12 J	0.072 U	0.38 U	0.037 U	0.038 U	0.037 U	0.039	0.038 U	0.037 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.11	0.038 U	1.72 J	0.68	2.6	0.037 U	0.19	0.012 J	0.449	0.0085 J	0.037 U	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E5S9 2 - 4 02/20/02 BW9-02E5S9-2-4	BW9-02-E5S13 2 - 4 02/26/02 BW9-02E5S13-2-4	BW9-02-E6 0 - 2 02/13/02 BW9-02E6-0-2DL	BW9-02-E6S2 2 - 4 02/11/02 BW9-02E6S2-2-4	BW9-02-E7N1 0 - 2 02/14/02 BW9-02E7N1-0-2DL	BW9-02-E7S1 2 - 4 02/14/02 BW9-02E7S1-2-4	BW9-02-E7S3 2 - 4 02/14/02 BW9-02E7S3-2-4	BW9-02-E7S5 2 - 4 02/14/02 BW9-02E7S5-2-4	BW9-02-E7S7 2 - 4 02/20/02 BW9-02E7S7-2-4	BW9-02-E7S12 2 - 4 02/26/02 BW9-02E7S12-2-4DL	BW9-02-E7S25 0.5 - 2 03/01/02 BW9-02E7S25-0-2	BW9-02-E8S2 2 - 4 02/13/02 BW9-02E8S2-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.19 U	0.038 U	0.19 U	0.035 U	0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.19 U	0.038 U	0.19 U	0.035 U	0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	1.5	0.038 U	1.2	0.035 U	0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.024 J	0.19 U	0.032 J	0.19 U	0.016 J	0.037 U	0.037 U	0.041	1.5	0.032 J	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.19 U	0.038 U	0.19 U	0.035 U	0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.037 U	0.064 J	0.038 U	0.19 U	0.035 U	0.037 U	0.037 U	0.037 U	0.19 U	0.037 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.037 U	0.024 J	1.564 J	0.032 J	1.2	0.016 J	0.037 U	0.037 U	0.041	1.5	0.032 J	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E8S11 2 - 4 02/26/02 BW9-02E8S11-2-4	BW9-02-E8S17 2 - 4 02/28/02 BW9-02E8S17-2-4	BW9-02-E9N1 0 - 2 02/19/02 BW9-02E9N1-0-2DL	BW9-02-E9S1 2 - 4 02/14/02 BW9-02E9S1-2-4	BW9-02-E9S3 2 - 4 02/14/02 BW9-02E9S3-2-4	BW9-02-E9S5 2 - 4 02/20/02 BW9-02E9S5-2-4	BW9-02-E9S15 2 - 4 02/28/02 BW9-02E9S15-2-4	BW9-02-E10 0 - 2 02/19/02 BW9-02E10-0-2DL	BW9-02-E10S2 2 - 4 02/14/02 BW9-02E10S2-2-4	BW9-02-E10S4 0.5 - 2 02/20/02 BW9-02E10S4-0-2DL	BW9-02-E10S4 2 - 4 12/21/04 BW9-02-E10S4-S(2-4)	BW9-02-E10S25 0.5 - 2 03/01/02 BW9-02E10S25-0-2
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.38 UJ	0.037 U	0.036 U	0.038 U	0.038 U	0.38 U	0.037 U	1.9 U	0.037 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.38 U	0.037 U	0.036 U	0.038 U	0.038 U	0.38 U	0.037 U	1.9 U	0.037 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	2.9	0.037 U	0.036 U	0.038 U	0.038 U	2	0.037 U	16	0.037 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.041	0.012 J	0.38 U	0.032 J	0.036 U	0.015 J	0.037 J	0.38 U	0.01 J	1.9 U	0.0071 J	0.036 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.38 U	0.037 U	0.036 U	0.038 U	0.038 U	0.38 U	0.037 U	1.9 U	0.037 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.037 U	0.15 J	0.037 U	0.036 U	0.038 U	0.038 U	0.12 J	0.037 U	1.9 U	0.037 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.041	0.012 J	3.05 J	0.032 J	0.036 U	0.015 J	0.037 J	2.12 J	0.01 J	16*	0.0071 J	0.036 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E11N1 0 - 2 02/20/02 BW9-02E11N1-0-2DL	BW9-02-E11S1 0 - 2 02/19/02 BW9-02E11S1-0-2DL	BW9-02-E11S1 2 - 4 02/19/02 BW9-02E11S1-2-4	BW9-02-E11S3 0 - 2 02/19/02 BW9-02E11S3-0-2DL	BW9-02-E11S3 2 - 4 02/19/02 BW9-02E11S3-2-4	BW9-02-E11S11 2 - 4 02/25/02 BW9-02E11S11-2-4	BW9-02-E11S14 2 - 4 02/28/02 BW9-02E11S14-2-4	BW9-02-E12S2 2 - 4 02/19/02 BW9-02E12S2-2-4	BW9-02-E13S7 2 - 4 02/26/02 BW9-02E13S7-2-4	BW9-02-E13S13 2 - 4 02/28/02 BW9-02E13S13-2-4	BW9-02-E13S25 0.5 - 2 02/28/02 BW9-02E13S25-0-2
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	37 U	0.037 U	39 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.04 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	37 U	0.037 U	39 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.04 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.4	37 U	0.037 U	39 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.04 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	360	0.13	340	0.037 U	0.012 J	0.04	0.038 U	0.037 U	0.053	0.059
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.38 U	37 U	0.037 U	39 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.04 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.095 J	37 U	0.037 U	39 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.04 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	1.495 J	360*	0.13	340*	0.037 U	0.012 J	0.04	0.038 U	0.037 U	0.053	0.059

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E14S6 2 - 4 02/26/02 BW9-02E14S6-2-4	BW9-02-E15N1 2 - 4 02/26/02 BW9-02E15N1-2-4DL	BW9-02-E15N3 0.5 - 2 02/28/02 BW9-02E15N3-0-2DL	BW9-02-E15S5 0.5 - 2 02/26/02 BW9-02E15S5-0-2	BW9-02-E16S4 0 - 2 02/26/02 BW9-02E16S4-0-2	BW9-02-E16S9 0 - 2 02/27/02 BW9-02E16S9-0-2DL	BW9-02-E16S13 0 - 2 03/01/02 BW9-02E16S13-0-2	BW9-02-E16S20 0 - 2 03/01/02 BW9-02E16S20-0-2DL	BW9-02-E17N1 0 - 2 02/26/02 BW9-02E17N1-0-2DL	BW9-02-E17S1 0 - 2 02/26/02 BW9-02E17S1-0-2	BW9-02-E17S3 0 - 2 02/26/02 BW9-02E17S3-0-2
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.37 UJ	0.39 U	0.036 U	0.038 U	0.19 U	0.037 U	0.073 U	0.38 UJ	0.037 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.37 U	0.39 U	0.036 U	0.038 U	0.19 U	0.037 U	0.073 U	0.38 U	0.037 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	5.6	0.39 U	0.036 U	0.038 U	0.19 U	0.037 U	0.073 U	2.2	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.37 U	5.5	0.16	0.17	1.9	0.13	0.57	0.38 U	0.037 U	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.37 U	0.39 U	0.036 U	0.038 U	0.19 U	0.037 U	0.073 U	0.38 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.37 UJ	0.39 U	0.036 U	0.038 U	0.19 U	0.037 U	0.073 U	0.38 U	0.037 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.037 U	5.6	5.5	0.16	0.17	1.9	0.13	0.57	2.2	0.037 U	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-E17S7 0 - 2 02/27/02 BW9-02E17S7-0-2DL	BW9-02-E18 0 - 2 02/26/02 BW9-02E18-0-2DL	BW9-02-E18S2 0 - 2 02/26/02 BW9-02E18S2-0-2	BW9-02-N1 4 - 6 12/17/01 BW9-02-N1-S(4-6)	BW9-02-N2 2 - 4 12/17/01 BW9-02-N2-S(2-4)	BW9-02-N3 0.5 - 2 12/19/01 BW9-02-N3-S(0-2)	BW9-02-S1 0.8 - 2 12/17/01 BW9-02-S1-S(0-2)DL	BW9-02-S1 2 - 4 12/17/01 BW9-02-S1-S(2-4)	BW9-02-S2 2 - 4 12/17/01 BW9-02-S2-S(2-4)	BW9-02-S3 2 - 4 12/19/01 BW9-02-S3-S(2-4)	BW9-02-S4 2 - 4 12/19/01 BW9-02-S4-S(2-4)	BW9-02-S5 0.5 - 2 12/20/01 BW9-02-S5-S(0-2)
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.075 U	0.37 U	0.038 U	0.037 U	0.037 U	0.038 U	2 U	0.037 U	0.037 U	0.038 U	0.038 U	0.039 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.075 U	0.37 U	0.038 U	0.037 U	0.037 U	0.038 U	2 U	0.037 U	0.037 U	0.038 U	0.038 U	0.039 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.075 U	1.8	0.038 U	0.037 U	0.037 U	0.038 U	2 U	0.037 U	0.037 U	0.038 U	0.038 U	0.039 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74	0.37 U	0.038 U	0.0079 J	0.012 J	0.024 J	19	0.037 U	0.037 U	0.038 U	0.0068 J	0.27
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.075 U	0.37 U	0.038 U	0.037 U	0.037 U	0.038 U	2 U	0.037 U	0.037 U	0.038 U	0.038 U	0.039 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.075 U	0.37 U	0.038 U	0.037 U	0.037 U	0.038 U	2 U	0.037 U	0.037 U	0.038 U	0.038 U	0.039 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.74	1.8	0.038 U	0.0079 J	0.012 J	0.024 J	19*	0.037 U	0.037 U	0.038 U	0.0068 J	0.27

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-W1 0.8 - 2 12/17/01 BW9-02-W1-S(0-2)DL	BW9-02-W1N1 2 - 4 01/02/02 BW9-02W1N1-2-4	BW9-02-W1N2 2 - 4 01/02/02 BW9-02W1N2-2-4	BW9-02-W1N3 0 - 2 01/14/02 BW9-02W1N3-0-2-N	BW9-02-W1S1 2 - 4 01/02/02 BW9-02W1S1-2-4	BW9-02-W1S2 2 - 4 01/02/02 BW9-02W1S2-2-4	BW9-02-W1S3 0.5 - 2 01/02/02 BW9-02W1S3-0-2DL	BW9-02-W1S3 2 - 4 01/30/02 BW9-02-W1S3(2-4)	BW9-02-W1S4 0.5 - 2 01/02/02 BW9-02W1S4-0-2DL	BW9-02-W2 0.8 - 2 01/30/02 BW9-02-W2(0-2)DL	BW9-02-W2 2 - 4 02/11/02 BW9-02W2-(2-4)
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	0.038 U	0.037 U	0.0062 U	0.037 U	0.038 U	19 U	0.038 U	0.2 U	3.7 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	0.038 U	0.037 U	0.013 U	0.037 U	0.038 U	19 U	0.038 U	0.2 U	3.7 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	0.038 U	0.037 U	0.021 U	0.037 U	0.038 U	19 U	0.038 U	0.2 U	3.7 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2.9	0.038 U	0.037 U	0.099	0.15	0.038 U	180	0.038 U	1.2	28	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	0.038 U	0.037 U	0.023 U	0.037 U	0.038 U	19 U	0.038 U	0.2 U	3.7 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.37 U	0.038 UJ	0.037 UJ	0.0086 UJ	0.018 J	0.038 UJ	19 UJ	0.038 U	0.2 UJ	3.7 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	2.9	0.038 U	0.037 U	0.099	0.168 J	0.038 U	180*	0.038 U	1.2	28*	0.036 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-W2N1 0 - 2 01/04/02 BW9-02W2N1-0-2DL	BW9-02-W2N1 2 - 4 01/04/02 BW9-02W2N1-2-4	BW9-02-W2N2 0 - 2 01/04/02 BW9-02W2N2-0-2	BW9-02-W2S1 0.5 - 2 01/04/02 BW9-02W2S1-0-2DL	BW9-02-W2S1 2 - 4 01/04/02 BW9-02W2S1-2-4	BW9-02-W2S2 0.5 - 2 01/04/02 BW9-02W2S2-0-2DL	BW9-02-W2S2 2 - 4 01/04/02 BW9-02W2S2-2-4	BW9-02-W2S3 2 - 4 01/16/02 BW9-02W2S3-2-4	BW9-02-W2S4 0.5 - 2 01/22/02 BW9-02W2S4-0-2DL	BW9-02-W2S16 2 - 4 02/28/02 BW9-02W2S16-2-4	BW9-02-W2S25 0.5 - 2 03/01/02 BW9-02W2S25-0-2	BW9-02-W3 2 - 4 01/22/02 BW9-02W3-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	0.036 U	0.037 U	18 U	0.037 U	3.7 U	0.039 U	0.037 U	0.19 U	0.039 U	0.037 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	0.036 U	0.037 U	18 U	0.037 U	3.7 U	0.039 U	0.037 U	0.19 U	0.039 U	0.037 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	0.036 U	0.037 U	18 U	0.037 U	3.7 U	0.039 U	0.037 U	0.19 U	0.039 U	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	21	0.036 U	0.037 U	150	0.037 U	41	0.039 U	0.037 U	0.84	0.039 U	0.01 J	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 U	0.036 U	0.037 U	18 U	0.037 U	3.7 U	0.039 U	0.037 U	0.19 U	0.039 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.8 UJ	0.036 UJ	0.037 UJ	18 UJ	0.037 UJ	3.7 U	0.039 UJ	0.037 UJ	0.19 U	0.039 U	0.037 U	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	21*	0.036 U	0.037 U	150*	0.037 U	41*	0.039 U	0.037 U	0.84	0.039 U	0.01 J	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-W3N1 2 - 4 01/16/02 BW9-02W3N1-2-4	BW9-02-W3N2 0 - 2 01/22/02 BW9-02W3N2-0-2DL	BW9-02-W3S1 2 - 4 01/16/02 BW9-02W3S1-2-4	BW9-02-W3S2 2 - 4 01/16/02 BW9-02W3S2-2-4	BW9-02-W3S3 2 - 4 01/22/02 BW9-02W3S3-2-4	BW9-02-W3S4 0.5 - 2 01/23/02 BW9-02W3S4-0-2	BW9-02-W3S9 2 - 4 02/28/02 BW9-02W3S9-2-4	BW9-02-W3S13 2 - 4 02/28/02 BW9-02W3S13-2-4	BW9-02-W4 2 - 4 01/22/02 BW9-02W4-2-4	BW9-02-W4N1 2 - 4 01/22/02 BW9-02W4N1-2-4	BW9-02-W4N2 0 - 2 01/23/02 BW9-02W4N2-0-2	BW9-02-W4S1 2 - 4 01/22/02 BW9-02W4S1-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.076 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.037 U	0.039 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.076 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.037 U	0.039 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.076 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.037 U	0.039 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.43	0.037 U	0.017 J	0.038 U	0.094	0.079	0.012 J	0.006 J	0.037 U	0.21	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 U	0.076 U	0.037 U	0.037 U	0.038 U	0.038 U	0.037 U	0.038 U	0.037 U	0.037 U	0.039 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.036 UJ	0.076 U	0.037 UJ	0.037 U	0.038 U	0.038 U	0.012 J	0.038 U	0.037 U	0.037 U	0.039 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.43	0.037 U	0.017 J	0.038 U	0.094	0.091 J	0.012 J	0.006 J	0.037 U	0.21	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-02-W4S2 2 - 4 01/22/02 BW9-02W4S2-2-4	BW9-02-W4S3 2 - 4 01/23/02 BW9-02W4S3-2-4	BW9-02-W4S4 0.5 - 2 01/25/02 BW9-02W4S4-0-2	BW9-02-W5 0 - 2 01/23/02 BW9-02W5-0-2	BW9-02-W5N1 0 - 2 01/23/02 BW9-02W5N1-0-2	BW9-02-W5S1 0.5 - 2 01/23/02 BW9-02W5S1-0-2	BW9-02-W5S2 0.5 - 2 01/23/02 BW9-02W5S2-0-2	BW9-02-W5S3 0.5 - 2 01/25/02 BW9-02W5S3-0-2	BW9-02-W5S25 0.5 - 2 03/01/02 BW9-02W5S25-0-2	BW9-02-W7S9 0.5 - 2 02/28/02 BW9-02W7S9-0-2	BW9-03 0.7 - 2 07/28/03 BW903S(0-2)DL	BW9-03 3 - 5 07/28/03 BW903S(3-5)	BW9-03 8 - 10 07/28/03 BW903S(8-10)
Detected PCBs																							
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.038 U	0.038 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.035 U	0.18 U	0.035 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.038 U	0.038 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.035 U	0.18 U	0.035 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.13	0.038 U	0.038 U	0.037 U	0.038 U	0.07	0.037 U	0.035 U	0.18 U	0.035 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.038 U	0.034 J	0.061	0.045	0.12	0.038 U	0.068	0.035 U	0.39	0.035 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.038 U	0.038 U	0.038 U	0.037 U	0.038 U	0.038 U	0.037 U	0.14	0.18 U	0.035 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	0.039 U	0.038 U	0.038 U	0.0095 J	0.037 U	0.038 U	0.038 U	0.037 U	0.035 U	0.28	0.035 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.039 U	0.13	0.034 J	0.0705 J	0.045	0.12	0.07	0.068	0.14	0.67	0.035 U	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-04 0.3 - 2 07/22/03 BW904S(0-2)	BW9-04 4.5 - 6.5 07/22/03 BW904S(4.5-6.5)	BW9-05 1.5 - 2.5 07/22/03 BW905S(0-2)	BW9-05 8 - 10 07/22/03 BW905S(8-10)	BW9-05 10 - 12 07/22/03 BW905S(10-12)	BW9-06 0.3 - 2 07/22/03 BW906S(0-2)	BW9-06 6 - 8 07/22/03 BW906S(6-8)	BW9-11 2 - 4 07/31/03 BW911S(0-2)	BW9-11 5 - 7 07/31/03 BW911S(5-7)DL	BW9-11 7 - 9 07/31/03 BW911S(7-9)DL	BW9-12 0.5 - 2 07/30/03 BW912S(0-2)	BW9-12 8 - 10 07/30/03 BW912S(8-10)	BW9-12 20 - 22 07/30/03 BW912S(20-22)	BW9-16 14 - 16 09/09/03 BW9-16-S(14-16)
Detected PCBs																								
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.035 U	0.036 U	0.038 U	0.036 U	0.039 U	0.035 U	0.18 U	0.078 U	0.034 U	0.035 U	0.039 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.035 U	0.036 U	0.038 U	0.036 U	0.039 U	0.035 U	0.18 U	0.078 U	0.034 U	0.035 U	0.039 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.035 U	0.036 U	0.038 U	0.036 U	0.039 U	0.035 U	0.18 U	0.078 U	0.034 U	0.035 U	0.039 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.035 U	0.036 U	0.038 U	0.036 U	0.039 U	0.19 J	2.8	1.3	0.034 U	0.035 U	0.039 U	0.0094 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.031 J	0.036 U	0.038 U	0.036 U	0.039 U	0.035 U	0.18 U	0.078 U	0.034 U	0.035 U	0.039 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.038 U	0.037 U	0.035 U	0.036 U	0.038 U	0.036 U	0.039 U	0.066 J	0.18 U	0.078 U	0.034 U	0.035 U	0.039 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	0.037 U	0.031 J	0.036 U	0.038 U	0.036 U	0.039 U	0.256 J	2.8	1.3	0.034 U	0.035 U	0.039 U	0.0094 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-23 0 - 2 04/19/05 BW9-23-S(0-2)041905DL	BW9-23 8 - 10 04/19/05 BW9-23-S(8-10)041905	BW9-24 0 - 2 04/19/05 BW9-24-S(0-2)041905DL	BW9-24 8 - 10 04/19/05 BW9-24-S(8-10)041905DL	BW9-25 0 - 2 04/19/05 BW9-25-S(0-2)041905DL	BW9-25 8 - 10 04/19/05 BW9-25-S(8-10)041905	BW9-26 0 - 2 04/19/05 BW9-26-S(0-2)041905DL	BW9-26 8 - 10 04/19/05 BW9-26-S(8-10)041905	BW9-27 0 - 2 04/18/05 BW9-27-S(0-2)041805
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.05 U	0.18 U	2 U	0.072 U	0.038 U	0.18 U	0.038 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.05 U	0.18 U	2 U	0.072 U	0.038 U	0.18 U	0.038 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.05 U	0.18 U	2 U	0.072 U	0.038 U	0.18 U	0.038 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.05 U	0.18 U	6.9	0.072 U	0.038 U	0.18 U	0.038 U	0.096
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.29 J	0.098	0.18 U	2 U	0.18	0.047 J	0.18 U	0.038 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.073 U	0.05 U	0.44 J	2 U	0.072 U	0.038 U	0.43 J	0.038 U	0.066
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.29 J	0.098	0.44 J	6.9	0.18	0.047 J	0.43 J	0.038 U	0.162

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-27 2 - 4 04/29/05 BW9-27(2-4)-S-042905DL	BW9-27 4 - 6 04/29/05 BW9-27(4-6)-S-042905DL	BW9-27 6 - 8 04/29/05 BW9-27(6-8)-S-042905DL	BW9-27 8 - 10 04/18/05 BW9-27-S(8-10)041805DL	BW9-27-E(9-14') 9 - 14 05/18/05 E927C-S(9-14)-051805DL	BW9-27-N(3-5') 3 - 5 05/17/05 N927C-S(3-5)-051705DL	BW9-27-N(5-9') 5 - 9 05/17/05 N927C-S(5-9)-051705DL	BW9-27-NA(3-5') 3 - 5 05/19/05 NA927C-S(3-5)-051905DL
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	3.8 U	7.5 U	3.8 U	1.9 U	0.18 U	0.19 U	0.39 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	3.8 U	7.5 U	3.8 U	1.9 U	0.18 U	0.19 U	0.39 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	3.8 U	7.5 U	3.8 U	1.9 U	2.9	1.1	0.39 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	3.8 U	7.5 U	3.8 U	35	0.18 U	0.19 U	5.9
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	3.8 U	7.5 U	3.8 U	1.9 U	0.18 U	0.19 U	0.39 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.7	30	72	16	1.9 U	1.2	1.4	0.39 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	2.7	30*	72*	16*	35*	4.1	2.5	5.9

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-27-NA(9-14') 9 - 14 05/18/05 NA927C-S(9-14)-051805DL	BW9-27-NB(3-5') 3 - 5 05/19/05 NB927C-S(3-5)-051905DL	BW9-27-NB(5-9) 5 - 9 05/25/05 NB927C-S(5-9)-052505	BW9-27-NB(9-14') 9 - 14 05/18/05 NB927C-S(9-14)-051805DL	BW9-27-NB(9-14') 9 - 14 05/19/05 NB927C-S(9-14)-051905DL	BW9-27-NBN(3-5) 3 - 5 05/24/05 NBN927C-S(3-5)-052405	BW9-27-NBW(3-5) 3 - 5 05/25/05 NBW927C-S(3-5)-052505	BW9-27-NBW(3-5) 3 - 5 05/25/05 NBW927C-S(3-5)-052505DLR2
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.19 U	1.8 U	0.034 U	0.15 U	0.38 U	0.036 U	0.036 U	NA
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.19 U	1.8 U	0.034 U	0.15 U	0.38 U	0.036 U	0.036 U	NA
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.19 U	11	0.071	0.15 U	1.2	0.036 U	NA	1.9 D
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	3.4	1.8 U	0.034 U	1.2	0.38 U	0.036 U	0.036 U	NA
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.19 U	1.8 U	0.57	0.15 U	0.38 U	0.32	1.3	NA
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	3.6	5.5	0.34	2.3	5.2	0.12	0.59	NA
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	7	16.5*	0.981	3.5	6.4	0.44	1.89	1.9

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-27-NC(3-5') 3 - 5 05/19/05 NC927C-S(3-5)-051905	BW9-27-NC(5-9) 5 - 9 05/25/05 NC927C-S(5-9)-052505	BW9-27-NC(5-9) 5 - 9 05/25/05 NC927C-S(5-9)-052505DLR2	BW9-27-NCE(3-5') 3 - 5 05/31/05 NCE927C-S(3-5)-053105	BW9-27-NCE(5-9') 5 - 9 05/31/05 NCE927C-S(5-9)-053105DL	BW9-27-NCN(5-9') 5 - 9 05/31/05 NCN927C-S(5-9)-053105	BW9-27-NCW(5-9') 5 - 9 05/31/05 NCW927C-S(5-9)-053105DL	BW9-27-S(5-9') 5 - 9 05/17/05 S927C-S(5-9)-051705DL	BW9-27-S(9-14') 9 - 14 05/17/05 S927C-S(9-14)-051705
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	NA	0.034 U	0.18 U	0.036 U	0.36 U	0.2 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	NA	0.034 U	0.18 U	0.036 U	0.36 U	0.2 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	NA	10 D	0.37	2.3	0.036 U	5.7	0.2 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	0.036 U	NA	0.034 U	0.18 U	0.036 U	0.36 U	0.2 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.33	0.036 U	NA	0.034 U	0.18 U	0.41	0.36 U	0.2 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	NA	3.2 D	0.5	2.3	0.036 U	0.95	1.5	0.38
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.33	0.036 U	13.2	0.87	4.6	0.41	6.65	1.5	0.38

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SQ)	MDEQ 2013 UPDATED CSAT	BW9-27-SA(3-5') 3 - 5 05/18/05 SA927C-S(3-5)-051805	BW9-27-SB(3-5') 3 - 5 05/18/05 SB927C-S(3-5)-051805	BW9-27-SB(5-9') 5 - 9 05/19/05 SB927C-S(5-9)-051905DL	BW9-27-SB(9-14') 9 - 14 05/19/05 SB927C-S(9-14)-051905DL	BW9-27-SC(3-5') 3 - 5 05/18/05 SC927C-S(3-5)-051805DL	BW9-27-SCE(3-5) 3 - 5 05/24/05 SCE927C-S(3-5)-052405	BW9-27-SCS(3-5) 3 - 5 05/24/05 SCS927C-S(3-5)-052405	BW9-27-SCS(3-5) 3 - 5 05/24/05 SCS927C-S(3-5)-052405DLR2
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.037 U	0.38 U	0.15 U	0.74 U	0.038 U	0.036 U	NA
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.037 U	0.38 U	0.15 U	0.74 U	0.038 U	0.036 U	NA
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.037 U	1.2	0.15 U	0.74 U	0.038 U	0.036 U	NA
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04	0.19	0.38 U	0.073 J	0.74 U	0.038 U	0.036 U	NA
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.039 U	0.037 U	0.38 U	0.15 U	0.74 U	0.038 U	0.036 U	NA
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19	0.44	4.9	2.4 J	12	1.2	NA	5.3 D
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.23	0.63	6.1	2.473 J	12	1.2	0.036 U	5.3

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-27-SCS(9-14) 9 - 14 05/25/05 SCS927C-S(9-14)-052505	BW9-27-SCS(9-14) 9 - 14 05/25/05 SCS927C-S(9-14)-052505DLR2	BW9-27-SCW(3-5) 3 - 5 05/25/05 SCW927C-S(3-5)-052505	BW9-27-SCW(9-14) 9 - 14 05/25/05 SCW927C-S(9-14)-052505	BW9-27-SCW(9-14) 9 - 14 05/25/05 SCW927C-S(9-14)-052505DLR2	BW9-27-SD(3-5') 3 - 5 05/19/05 SD927C-S(3-5)-051905DL	BW9-27-W(5-9') 5 - 9 05/18/05 W927C-S(5-9)-051805DL	BW9-27-W(9-14') 9 - 14 05/18/05 W927C-S(9-14)-051805DL
Detected PCBs																		
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	NA	0.036 U	0.037 U	NA	0.36 U	0.18 U	0.75 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	NA	0.036 U	0.037 U	NA	0.36 U	0.18 U	0.75 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	NA	0.036 U	0.037 U	NA	1.9	0.18 U	0.75 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	NA	0.036 U	0.037 U	NA	0.36 U	0.18 U	0.75 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.038 U	NA	0.036 U	0.037 U	NA	0.36 U	0.18 U	0.75 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	NA	4.4 J	0.78	NA	1.6 D	0.15 J	2.5	10
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.038 U	4.4 J	0.78	0.037 U	1.6	2.05 J	2.5	10

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-27-WA(3-5') 3 - 5 05/18/05 WA927C-S(3-5)-051805	BW9-27-WB(3-5') 3 - 5 05/18/05 WB927C-S(3-5)-051805DL	BW9-27-WC(3-5') 3 - 5 05/18/05 WC927C-S(3-5)-051805DL	BW9-28 0 - 2 04/18/05 BW9-28-S(0-2)041805	BW9-28 8 - 10 04/18/05 BW9-28-S(8-10)041805	BW9-29 0 - 2 04/19/05 BW9-29-S(0-2)041905	BW9-29 8 - 10 04/19/05 BW9-29-S(8-10)041905	BW9-30 0 - 2 04/18/05 BW9-30-S(0-2)041805	BW9-30 8 - 10 04/18/05 BW9-30-S(8-10)041805
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 UJ	0.073 U	0.075 U	0.037 U	0.038 U	0.036 U	0.039 U	0.038 U	0.038 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 UJ	0.073 U	0.075 U	0.037 U	0.038 U	0.036 U	0.039 U	0.038 U	0.038 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 UJ	0.061 J	0.093	0.037 U	0.038 U	0.036 U	0.039 U	0.038 U	0.038 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 UJ	0.073 U	0.075 U	0.22	0.034 J	0.036 U	0.039 U	0.038 U	0.038 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 UJ	0.073 U	0.075 U	0.037 U	0.038 U	0.084	0.039 U	0.038 U	0.038 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.13 J	0.8	0.86	0.038	0.016 J	0.036 U	0.018 J	0.038 U	0.038 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.13 J	0.861 J	0.953	0.258	0.05 J	0.084	0.018 J	0.038 U	0.038 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-31 0 - 2 04/18/05 BW9-31-S(0-2)041805	BW9-31 8 - 10 04/18/05 BW9-31-S(8-10)041805	BW9-32 0 - 2 04/19/05 BW9-32-S(0-2)041905DL	BW9-32 8 - 10 04/19/05 BW9-32-S(8-10)041905DL	BW9-38 0 - 2 04/19/05 BW9-38-S(0-2)041905	BW9-38 8 - 10 04/19/05 BW9-38-S(8-10)041905DL	BW9-39 0 - 2 04/19/05 BW9-39-S(0-2)041905	BW9-39 8 - 10 04/19/05 BW9-39-S(8-10)041905DL	BW9-40 0 - 2 04/19/05 BW9-40-S(0-2)041905
Detected PCBs																			
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	0.72 U	0.76 U	0.037 U	1.8 U	0.037 U	0.8 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	0.72 U	0.76 U	0.037 U	1.8 U	0.037 U	0.8 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	0.72 U	0.76 U	0.037 U	7.6	0.037 U	3.5	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	6	5.3	0.037 U	1.8 U	0.037 U	0.8 U	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	0.72 U	0.76 U	0.06	1.8 U	0.037 U	0.8 U	0.15
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.04 U	0.039 U	0.72 U	0.76 U	0.037 U	1.8 U	0.13 J	0.8 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.04 U	0.039 U	6	5.3	0.06	7.6	0.13 J	3.5	0.15

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW9-40 8 - 10 04/19/05 BW9-40-S(8-10)041905DL	BW9-41 0 - 2 04/19/05 BW9-41-S(0-2)041905DL	BW9-41 8 - 10 04/19/05 BW9-41-S(8-10)041905DL	MWW9-01 1 - 2 07/28/03 MWW901S(0-2)	MWW9-01 8 - 10 07/28/03 MWW901S(8-10)	MWW9-01 24.5 - 26.5 07/28/03 MWW901S(24.5-26.5)	MWW9-02 0.3 - 2 07/28/03 MWW902S(0-2)	MWW9-02 8 - 10 07/28/03 MWW902S(8-10)	MWW9-02 23 - 25 07/28/03 MWW902S(23-25)	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)DL	SW9-02 0 - 2 06/27/01 SW9-02-S(02)062701DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.18 U	0.38 U	0.037 U	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.18 U	3.4 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.18 U	0.38 U	0.037 U	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.18 U	3.4 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.39	0.18 U	2.1	0.037 U	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.18 U	3.4 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.18 U	0.38 U	0.064	0.035 U	0.035 U	0.034 J	0.036 U	0.035 U	0.46	7.3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.18 U	0.38 U	0.037 U	0.035 U	0.035 U	0.036 U	0.036 U	0.035 U	0.18 U	3.4 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.27	0.63	0.38 U	0.042	0.035 U	0.035 U	0.014 J	0.014 J	0.0048 J	0.083 J	3.4 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.66	0.63	2.1	0.106	0.035 U	0.035 U	0.048 J	0.014 J	0.0048 J	0.543 J	7.3

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-03 0 - 2 06/27/01 SW9-03-S(0-2)062701	SW9-04 0 - 2 06/27/01 SW9-04-S(0-2)062701	SW9-05 0 - 2 06/27/01 SW9-05-S(0-2)062701	SW9-06 0 - 2 06/27/01 SW9-06-S(0-2)062701	SW9-07 0 - 2 06/27/01 SW9-07-S(02)062701DL	SW9-08 0 - 2 06/27/01 SW9-08-S(0-2)	SW9-09 0 - 2 06/27/01 SW9-09-S(02)062701DL	SW9-09 8 - 10 01/03/02 SW9-09-S(8-10)DL	SW9-09-E1 6 - 8 01/04/02 SW9-09E1-6-8DL	SW9-09-E1 8 - 10 01/29/02 SW9-09E1-(8-10)DL	SW9-09-E1N1 6 - 8 01/04/02 SW9-09E1N1-6-8-N
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U [0.036 U]	0.035 U	0.036 U	0.038 U	0.37 U	0.037 U	3.5 U	0.72 U	3.7 U	3.7 U	0.059 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U [0.036 U]	0.035 U	0.036 U	0.038 U	0.37 U	0.037 U	3.5 U	0.72 U	3.7 U	3.7 U	0.12 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U [0.036 U]	0.035 U	0.036 U	0.038 U	0.37 U	0.037 U	3.5 U	0.72 U	3.7 U	3.7 U	0.2 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.16 [0.11]	0.035 U	0.036 U	0.038 U	0.37 U	0.037 U	26	6.7	27	12	3.9
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U [0.036 U]	0.058	0.25	0.16	1.7	0.037 U	3.5 U	0.72 U	3.7 U	3.7 U	0.22 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.07 [0.11]	0.035 U	0.036 U	0.038 U	0.37 U	0.028 J	3.5 U	0.72 UJ	3.7 UJ	3.7 U	0.083 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.23 [0.22]	0.058	0.25	0.16	1.7	0.028 J	26*	6.7	27*	12	3.9

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E1N1 10 - 12 01/31/02 SW9-09-E1N1(10-12)DL	SW9-09-E1N1 12 - 14 01/31/02 SW9-09-E1N1(12-14)DL	SW9-09-E1N2 8 - 10 01/31/02 SW9-09-E1N2(8-10)DL	SW9-09-E1N2 14 - 16 02/12/02 SW9-09E1N2-14-16DL	SW9-09-E1N3 0.5 - 2 01/22/02 SW9-09E1N3-0-2	SW9-09-E1N3 2 - 4 01/22/02 SW9-09E1N3-2-4	SW9-09-E1N3 4 - 6 01/22/02 SW9-09E1N3-4-6	SW9-09-E1N3 6 - 8 02/12/02 SW9-09E1N3-6-8	SW9-09-E1N3 8 - 10 02/12/02 SW9-09E1N3-8-10	SW9-09-E1N3 10 - 12 02/12/02 SW9-09E1N3-10-12	SW9-09-E1N3 12 - 14 02/12/02 SW9-09E1N3-12-14
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.75 U	0.18 U	0.76 U	0.19 U	0.036 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.75 U	0.18 U	0.76 U	0.19 U	0.036 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.75 U	0.18 U	0.76 U	0.19 U	0.036 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6.1	2.6	6.9	1.4	0.046	0.036 U	0.036 U	0.0066 J	0.036 U	0.073	0.037 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.75 U	0.18 U	0.76 U	0.19 U	0.036 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.75 U	0.18 U	0.76 U	0.094 J	0.078	0.036 U	0.036 U	0.035 U	0.036 U	0.0093 J	0.037 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	6.1	2.6	6.9	1.494 J	0.124	0.036 U	0.036 U	0.0066 J	0.036 U	0.0823 J	0.037 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E1S1 10 - 12 01/29/02 SW9-09E1S1-(10-12)DL	SW9-09-E1S2 2 - 4 01/03/02 SW9-09E1S2-2-4DL	SW9-09-E1S2 4 - 6 01/03/02 SW9-09E1S2-4-6DL	SW9-09-E1S2 6 - 8 01/29/02 SW9-09E1S2-(6-8)DL	SW9-09-E1S2 10 - 12 01/29/02 SW9-09-E1S2(10-12)DL	SW9-09-E1S3 0 - 2 01/29/02 SW9-09E1S3-(0-2)	SW9-09-E1S3 2 - 4 01/29/02 SW9-09E1S3-(2-4)	SW9-09-E1S3 4 - 6 01/29/02 SW9-09E1S3-(4-6)DL	SW9-09-E2 8 - 10 01/04/02 SW9-09E2-8-10DL	SW9-09-E2 12 - 14 02/12/02 SW9-09E2-12-14DL	SW9-09-E2N1 0 - 2 01/04/02 SW9-09E2N1-0-2-N
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	3.6 U	3.8 U	0.36 U	0.71 U	0.035 U	0.036 U	0.073 U	1.8 U	0.73 U	0.061 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	3.6 U	3.8 U	0.36 U	0.71 U	0.035 U	0.036 U	0.073 U	1.8 U	0.73 U	0.13 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	3.6 U	3.8 U	0.36 U	0.71 U	0.035 U	0.036 U	0.073 U	1.8 U	0.73 U	0.21 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.96	45	30	2.1	5.7	0.14	0.033 J	0.31	16	5.1	5.3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	3.6 U	3.8 U	0.36 U	0.71 U	0.035 U	0.036 U	0.073 U	1.8 U	0.73 U	0.23 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	3.6 UJ	3.8 UJ	0.36 U	0.71 U	0.058	0.036 U	0.073 U	1.8 UJ	0.73 U	0.18 J
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.96	45*	30*	2.1	5.7	0.198	0.033 J	0.31	16*	5.1	5.48 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E2N1 6 - 8 01/04/02 SW9-09E2N1-6-8-N	SW9-09-E2N1 14 - 16 02/13/02 SW9-09E2N1-14-16DL	SW9-09-E2N2 0 - 2 01/22/02 SW9-09E2N2-0-2DL	SW9-09-E2N2 2 - 4 01/22/02 SW9-09E2N2-2-4DL	SW9-09-E2N2 4 - 6 01/22/02 SW9-09E2N2-4-6DL	SW9-09-E2N2 12 - 14 02/06/02 SW9-09-E2N2(12-14)	SW9-09-E2N3 0.5 - 2 02/12/02 SW9-09E2N3-0-2	SW9-09-E2N3 2 - 4 02/12/02 SW9-09E2N3-2-4	SW9-09-E2N3 4 - 6 02/12/02 SW9-09E2N3-4-6	SW9-09-E2N3 6 - 8 02/12/02 SW9-09E2N3-6-8	SW9-09-E2N3 8 - 10 02/12/02 SW9-09E2N3-8-10
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.058 U	0.39 U	0.37 U	3.8 U	1.9 U	0.038 U	0.038 U	0.037 U	0.037 U	0.036 U	0.039 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.12 U	0.39 U	0.37 U	3.8 U	1.9 U	0.038 U	0.038 U	0.037 U	0.037 U	0.036 U	0.039 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.39 U	0.37 U	3.8 U	1.9 U	0.038 U	0.038 U	0.037 U	0.037 U	0.036 U	0.039 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.3	3.9	3.3	41	17	0.28	0.038 U	0.037 U	0.037 U	0.036 U	0.0069 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.22 U	0.39 U	0.37 U	3.8 U	1.9 U	0.038 U	0.038 U	0.037 U	0.037 U	0.036 U	0.039 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.081 U	0.39 U	0.37 U	3.8 U	1.9 U	0.046	0.038 U	0.037 U	0.037 U	0.036 U	0.039 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	2.3	3.9	3.3	41*	17*	0.326	0.038 U	0.037 U	0.037 U	0.036 U	0.0069 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E2N3 10 - 12 02/12/02 SW9-09E2N3-10-12	SW9-09-E2S1 10 - 12 01/29/02 SW9-09E2S1-(10-12)DL	SW9-09-E2S2 0 - 2 01/31/02 SW9-09E2S2-0-2DL	SW9-09-E2S2 2 - 4 01/31/02 SW9-09E2S2-2-4DL	SW9-09-E2S2 6 - 8 01/31/02 SW9-09E2S2-6-8DL	SW9-09-E2S2 10 - 12 01/31/02 SW9-09E2S2-10-12	SW9-09-E3 2 - 4 12/20/01 SW9-09-E3-S(2-4)DL	SW9-09-E3 4 - 6 12/20/01 SW9-09-E3-S(4-6)DL	SW9-09-E3 6 - 8 02/04/02 SW9-09E3-6-8DL	SW9-09-E3 8 - 10 02/04/02 SW9-09E3-8-10DL	SW9-09-E3 10 - 12 02/04/02 SW9-09E3-10-12DL
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	1.9 U	0.74 U	0.71 U	1.8 U	0.036 U	2 U	0.4 U	0.78 U	0.39 U	0.37 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	1.9 U	0.74 U	0.71 U	1.8 U	0.036 U	2 U	0.4 U	0.78 U	0.39 U	0.37 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	1.9 U	0.74 U	0.71 U	1.8 U	0.036 U	2 U	0.4 U	0.78 U	0.39 U	0.37 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	5.7	4	4.1	7.6	0.036 U	15	3.2	4.2	1.6	4
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	1.9 U	0.74 U	0.71 U	1.8 U	0.036 U	2 U	0.4 U	0.78 U	0.39 U	0.37 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	1.9 U	0.26 J	0.71 U	1.8 U	0.036 U	2 U	0.4 U	0.78 U	0.39 U	0.37 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	5.7	4.26 J	4.1	7.6	0.036 U	15	3.2	4.2	1.6	4

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SQ)	MDEQ 2013 UPDATED CSAT	SW9-09-E3N1 0 - 2 01/22/02 SW9-09E3N1-0-2DL	SW9-09-E3N1 10 - 12 02/13/02 SW9-09E3N1-10-12DL	SW9-09-E3N1 12 - 14 02/13/02 SW9-09E3N1-12-14DL	SW9-09-E3N2 0 - 2 02/13/02 SW9-09E3N2-0-2DL	SW9-09-E3N2 2 - 4 02/13/02 SW9-09E3N2-2-4DL	SW9-09-E3N2 4 - 6 02/13/02 SW9-09E3N2-4-6DL	SW9-09-E3N2 6 - 8 02/13/02 SW9-09E3N2-6-8DL	SW9-09-E3N2 8 - 10 02/13/02 SW9-09E3N2-8-10DL	SW9-09-E3N2 10 - 12 02/13/02 SW9-09E3N2-10-12	SW9-09-E3N2 12 - 14 02/13/02 SW9-09E3N2-12-14DL	SW9-09-E3N3 0.5 - 2 02/14/02 SW9-09E3N3-0-2
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.76 U	0.19 U	1.9 U	0.74 U	0.38 U	3.9 U	3.9 U	0.038 U	0.38 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.76 U	0.19 U	1.9 U	0.74 U	0.38 U	3.9 U	3.9 U	0.038 U	0.38 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.63	0.76 U	0.19 U	1.9 U	0.74 U	0.38 U	3.9 U	3.9 U	0.038 U	0.38 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	7.7	1.1	23	5.4	3.5	15	29	0.038 U	5.1	0.0057 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.19 U	0.76 U	0.19 U	1.9 U	0.74 U	0.38 U	3.9 U	3.9 U	0.038 U	0.38 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.1 J	0.76 U	0.19 U	1.9 U	0.74 U	0.38 U	3.9 U	3.9 U	0.038 U	0.23 J	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.73 J	7.7	1.1	23*	5.4	3.5	15	29*	0.038 U	5.33 J	0.0057 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E3N3 2 - 4 02/14/02 SW9-09E3N3-2-4	SW9-09-E3N3 4 - 6 02/14/02 SW9-09E3N3-4-6	SW9-09-E3N3 6 - 8 02/14/02 SW9-09E3N3-6-8	SW9-09-E3N3 8 - 10 02/14/02 SW9-09E3N3-8-10	SW9-09-E3N3 10 - 12 02/14/02 SW9-09E3N3-10-12	SW9-09-E3N3 12 - 14 02/14/02 SW9-09E3N3-12-14	SW9-09-E3S1 10 - 12 01/31/02 SW9-09E3S1-10-12DL	SW9-09-E3S2 2 - 4 01/25/02 SW9-09E3S2-2-4	SW9-09-E3S2 4 - 6 01/25/02 SW9-09E3S2-4-6	SW9-09-E3S2 6 - 8 01/25/02 SW9-09E3S2-6-8	SW9-09-E3S2 8 - 10 01/25/02 SW9-09E3S2-8-10	SW9-09-E3S3 0 - 2 02/12/02 SW9-09E3S3-0-2
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	3.8 U	0.035 U	0.035 U	0.035 U	0.036 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	3.8 U	0.035 U	0.035 U	0.035 U	0.036 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	3.8 U	0.035 U	0.035 U	0.035 U	0.036 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	16	0.02 J	0.0098 J	0.035 U	0.036 U	0.26
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	3.8 U	0.035 U	0.035 U	0.035 U	0.036	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	3.8 U	0.035 U	0.035 U	0.035 U	0.036 U	0.092
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.036 U	0.036 U	16*	0.02 J	0.0098 J	0.035 U	0.036	0.352

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E4 0 - 2 12/20/01 SW9-09-E4-S(0-2)	SW9-09-E4 6 - 8 02/04/02 SW9-09E4-6-8DL	SW9-09-E4 8 - 10 02/04/02 SW9-09E4-8-10DL	SW9-09-E4N1 4 - 6 02/06/02 SW9-09E4N1-4-6DL	SW9-09-E4N1 6 - 8 02/06/02 SW9-09E4N1-6-8DL	SW9-09-E4N1 8 - 9 02/06/02 SW9-09E4N1-8-9DL	SW9-09-E4N3 0.5 - 2 02/18/02 SW9-09E4N3-0-2	SW9-09-E4N3 2 - 4 02/18/02 SW9-09E4N3-2-4	SW9-09-E4N3 4 - 6 02/18/02 SW9-09E4N3-4-6	SW9-09-E4N3 6 - 8 02/18/02 SW9-09E4N3-6-8	SW9-09-E4N3 8 - 10 02/18/02 SW9-09E4N3-8-10	SW9-09-E4N3 10 - 12 02/18/02 SW9-09E4N3-10-12
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.8 U	0.78 U	0.36 U	0.75 U	0.18 U	0.035 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.8 U	0.78 U	0.36 U	0.75 U	0.18 U	0.035 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.8 U	0.78 U	0.36 U	0.75 U	0.18 U	0.035 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.11	10	4.9	2.8	4.5	1.6	0.047	0.031 J	0.041	0.035 U	0.035 U	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.8 U	0.78 U	0.36 U	0.75 U	0.18 U	0.035 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.042	1.8 U	0.78 U	0.36 U	0.75 U	0.18 U	0.016 J	0.011 J	0.018 J	0.0081 J	0.035 U	0.036 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.152	10	4.9	2.8	4.5	1.6	0.063 J	0.042 J	0.059 J	0.0081 J	0.035 U	0.036 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E4N3 12 - 14 02/18/02 SW9-09E4N3-12-14	SW9-09-E4S1 10 - 12 01/31/02 SW9-09E4S1-10-12DL	SW9-09-E4S2 0 - 2 01/31/02 SW9-09E4S2-0-2DL	SW9-09-E4S2 2 - 4 01/31/02 SW9-09E4S2-2-4DL	SW9-09-E4S2 4 - 6 01/31/02 SW9-09E4S2-4-6	SW9-09-E4S2 6 - 8 01/31/02 SW9-09E4S2-6-8	SW9-09-E4S2 8 - 10 01/31/02 SW9-09E4S2-8-10	SW9-09-E4S3 0 - 2 02/18/02 SW9-09E4S3-0-2	SW9-09-E5 0.5 - 2 02/06/02 SW9-09E5-0-2	SW9-09-E5 2 - 4 02/06/02 SW9-09E5-2-4	SW9-09-E5 4 - 6 02/06/02 SW9-09E5-4-6	SW9-09-E5 6 - 8 02/06/02 SW9-09E5-6-8	SW9-09-E5N1 0.5 - 2 02/13/02 SW9-09E5N1-0-2
Detected PCBs																							
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.9 U	3.7 U	0.18 U	0.035 U	0.036 U	0.035 U	0.037 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.9 U	3.7 U	0.18 U	0.035 U	0.036 U	0.035 U	0.18	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.9 U	3.7 U	0.18 U	0.035 U	0.036 U	0.035 U	0.037 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	15	20	2.3	0.036	0.008 J	0.035 U	0.037 U	0.011 J	0.021 J	0.0075 J	0.035 J	0.022 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.9 U	3.7 U	0.18 U	0.035 U	0.036 U	0.035 U	0.037 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.037 U	1.9 U	3.7 U	0.4	0.035 U	0.036 U	0.035 U	0.096	0.036 U	0.011 J	0.036 U	0.037 U	0.015 J
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.037 U	15	20*	2.7	0.036	0.008 J	0.035 U	0.276	0.011 J	0.032 J	0.0075 J	0.035 J	0.037 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-E5N1 2 - 4 02/13/02 SW9-09E5N1-2-4	SW9-09-E5N2 0.5 - 2 02/18/02 SW9-09E5N2-0-2	SW9-09-E5N2 2 - 4 02/18/02 SW9-09E5N2-2-4	SW9-09-E5N2 4 - 6 02/18/02 SW9-09E5N2-4-6	SW9-09-E5N2 6 - 8 02/18/02 SW9-09E5N2-6-8	SW9-09-E5N2 8 - 10 02/18/02 SW9-09E5N2-8-10	SW9-09-E5N2 10 - 12 02/18/02 SW9-09E5N2-10-12	SW9-09-E5N2 12 - 14 02/18/02 SW9-09E5N2-12-14	SW9-09-E5S1 0.5 - 2 01/31/02 SW9-09E5S1-0-2	SW9-09-E5S1 2 - 4 01/31/02 SW9-09E5S1-2-4	SW9-09-E5S2 0.5 - 2 02/19/02 SW9-09E5S2-0-2	SW9-09-N1 8 - 10 01/03/02 SW9-09N1-8-10DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	1.8 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	1.8 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	1.8 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.018 J	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	20
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.037 U	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	1.8 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.016 J	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	1.8 UJ
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.034 J	0.036 U	0.036 U	0.037 U	0.039 U	0.038 U	0.036 U	0.036 U	0.037 U	0.035 U	20*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-N1 10 - 12 01/31/02 SW9-09-N1(10-12)DL	SW9-09-N1 12 - 14 02/19/02 SW9-09N1-12-14DL	SW9-09-N2 4 - 6 12/18/01 SW9-09-N2-S(4-6)DL	SW9-09-N2 6 - 8 01/29/02 SW9-09-N2(6-8)DL	SW9-09-N2 8 - 10 01/29/02 SW9-09-N2(8-10)DL	SW9-09-N2 10 - 12 01/29/02 SW9-09-N2(10-12)DL	SW9-09-N2 14 - 16 02/27/02 SW9-09N2-14-16DL	SW9-09-N3 0.5 - 2 12/20/01 SW9-09-N3-S(0-2)	SW9-09-N3 2 - 4 12/20/01 SW9-09-N3-S(2-4)	SW9-09-S1 8 - 10 01/29/02 SW9-09S1-(8-10)DL	SW9-09-S2 4 - 6 12/18/01 SW9-09-S2-S(4-6)DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	3.8 U	0.78 U	1.8 U	0.76 U	0.37 U	0.79 U	0.035 U	0.036 U	3.9 U	0.76 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	3.8 U	0.78 U	1.8 U	0.76 U	0.37 U	0.79 U	0.035 U	0.036 U	3.9 U	0.76 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	3.8 U	0.78 U	1.8 U	0.76 U	0.37 U	0.79 U	0.035 U	0.036 U	3.9 U	0.76 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	7.2	24	8.4	7	5.9	4.7	10	0.035 U	0.036 U	22	6.3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	3.8 U	0.78 U	1.8 U	0.76 U	0.37 U	0.79 U	0.035 U	0.036 U	3.9 U	0.76 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.74 U	3.8 U	0.78 U	1.8 U	0.76 U	0.37 U	0.79 U	0.4	0.036 U	3.9 U	0.76 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	7.2	24*	8.4	7	5.9	4.7	10	0.4	0.036 U	22*	6.3

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-S3 0 - 2 12/20/01 SW9-09-S3-S(0-2)DL	SW9-09-S3 2 - 4 12/20/01 SW9-09-S3-S(2-4)	SW9-09-W1 6 - 8 01/03/02 SW9-09W1-6-8DL	SW9-09-W1 10 - 12 02/12/02 SW9-09W1-10-12DL	SW9-09-W1N1 4 - 6 01/03/02 SW9-09W1N1-4-6DL	SW9-09-W1N1 6 - 8 01/03/02 SW9-09W1N1-6-8DL	SW9-09-W1N1 14 - 16 02/27/02 SW9-09W1N1-14-16DL	SW9-09-W1N2 4 - 6 01/03/02 SW9-09W1N2-4-6DL	SW9-09-W1N2 6 - 8 01/03/02 SW9-09W1N2-6-8DL	SW9-09-W1N2 8 - 10 01/29/02 SW9-09W1N2-(8-10)DL
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	1.8 U	0.83 U	1.8 U	0.73 U	0.4 U	3.8 UJ	1.9 U	4.1 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	1.8 U	0.83 U	1.8 U	0.73 U	0.4 U	3.8 U	1.9 U	4.1 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	1.8 U	0.83 U	1.8 U	0.73 U	0.4 U	48	1.9 U	4.1 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.1	0.036 U	17	5.6	15	9.3	5.2	3.8 U	23	45
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	1.8 U	0.83 U	1.8 U	0.73 U	0.4 U	3.8 U	1.9 U	4.1 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.18 U	0.036 U	1.8 UJ	0.24 J	1.8 UJ	0.73 UJ	0.4 U	3.8 UJ	1.9 UJ	4.1 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	1.1	0.036 U	17*	5.84 J	15	9.3	5.2	48*	23*	45*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SQ)	MDEQ 2013 UPDATED CSAT	SW9-09-W1N2 10 - 12 01/29/02 SW9-09W1N2-(10-12)DL	SW9-09-W1N2 14 - 16 02/27/02 SW9-09W1N2-14-16DL	SW9-09-W1N3 0.5 - 2 01/17/02 SW9-09W1N3-0-2	SW9-09-W1N3 2 - 4 01/17/02 SW9-09W1N3-2-4	SW9-09-W1N3 4 - 6 01/17/02 SW9-09W1N3-(4-6)	SW9-09-W1N3 6 - 8 01/17/02 SW9-09W1N3-(6-8)	SW9-09-W1N3 8 - 10 02/18/02 SW9-09W1N3-8-10	SW9-09-W1N3 10 - 12 02/18/02 SW9-09W1N3-10-12	SW9-09-W1N3 12 - 14 02/18/02 SW9-09W1N3-12-14	SW9-09-W1S1 6 - 8 01/03/02 SW9-09W1S1-6-8DL	SW9-09-W1S1 8 - 10 02/06/02 SW9-09W1S1-8-10DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.1 U	0.73 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.035 U	0.036 U	1.9 U	0.37 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.1 U	0.73 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.035 U	0.036 U	1.9 U	0.37 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.1 U	0.73 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.035 U	0.036 U	13	0.37 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	24	9.2	0.036 U	0.036 U	0.012 J	0.012 J	0.036 U	0.035 U	0.036 U	1.9 U	4.8
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.1 U	0.73 U	0.036 U	0.036 U	0.035 U	0.036 U	0.036 U	0.035 U	0.036 U	1.9 U	0.37 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	2.1 U	0.73 U	0.32 J	0.036 U	0.0083 J	0.036 U	0.036 U	0.035 U	0.036 U	1.9 U	0.37 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	24*	9.2	0.32 J	0.036 U	0.0203 J	0.012 J	0.036 U	0.035 U	0.036 U	13	4.8

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-W1S2 2 - 4 01/03/02 SW9-09W1S2-2-4DL	SW9-09-W1S2 4 - 6 02/04/02 SW9-09W1S2-4-6DL	SW9-09-W1S2 6 - 8 02/04/02 SW9-09W1S2-6-8DL	SW9-09-W1S2 8 - 10 02/04/02 SW9-09W1S2-8-10	SW9-09-W1S2 10 - 12 02/04/02 SW9-09W1S2-10-12DL	SW9-09-W1S2 12 - 14 02/04/02 SW9-09W1S2-12-14DL	SW9-09-W1S3 0 - 2 01/23/02 SW9-09W1S3-0-2	SW9-09-W2 4 - 6 12/18/01 SW9-09-W2-S(4-6)DL	SW9-09-W2 12 - 14 02/12/02 SW9-09W2-12-14DL	SW9-09-W2N1 2 - 4 01/03/02 SW9-09W2N1-2-4DL	SW9-09-W2N1 10 - 12 02/12/02 SW9-09W2N1-10-12DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	0.73 U	0.19 U	0.038 U	0.39 U	0.38 U	0.035 U	0.79 U	0.81 U	0.75 U	1.9 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	0.73 U	0.19 U	0.038 U	0.39 U	0.38 U	0.035 U	0.79 U	0.81 U	0.75 U	1.9 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	0.73 U	0.19 U	0.038 U	0.39 U	0.38 U	0.035 U	0.79 U	0.81 U	0.75 U	1.9 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	6	7.7	0.59	0.12	2.6	4.1	0.03 J	8.8	4	14	24
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 U	0.73 U	0.19 U	0.038 U	0.39 U	0.38 U	0.035 U	0.79 U	0.81 U	0.75 U	1.9 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.36 UJ	0.73 U	0.093 J	0.05	0.39 U	0.19 J	0.035 U	0.79 U	0.81 U	0.75 UJ	1.9 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	6	7.7	0.683 J	0.17	2.6	4.29 J	0.03 J	8.8	4	14	24*

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-W2N1 14 - 16 02/27/02 SW9-09W2N1-14-16DL	SW9-09-W2N2 0 - 2 01/17/02 SW9-09W2N2-0-2DL	SW9-09-W2N2 4 - 6 01/17/02 SW9-09W2N2-(4-6)	SW9-09-W2N2 6 - 8 01/17/02 SW9-09W2N2-(6-8)DL	SW9-09-W2N2 8 - 10 02/18/02 SW9-09W2N2-8-10	SW9-09-W2N2 10 - 12 02/18/02 SW9-09W2N2-10-12	SW9-09-W2N2 12 - 14 02/18/02 SW9-09W2N2-12-14	SW9-09-W2N3 0.5 - 2 02/18/02 SW9-09W3N3-0-2DL	SW9-09-W2N3 2 - 4 02/18/02 SW9-09W2N3-2-4	SW9-09-W2N3 4 - 6 02/18/02 SW9-09W2N3-4-6	SW9-09-W2N3 6 - 8 02/18/02 SW9-09W2N3-6-8
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.9 U	1.9 U	0.035 U	3.8 U	0.036 U	0.035 U	0.037 U	0.072 U	0.035 U	0.035 U	0.035 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.9 U	1.9 U	0.035 U	3.8 U	0.036 U	0.035 U	0.037 U	0.072 U	0.035 U	0.035 U	0.035 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.9 U	1.9 U	0.035 U	3.8 U	0.036 U	0.035 U	0.037 U	0.072 U	0.035 U	0.035 U	0.035 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	8.6	15	0.021 J	30	0.036 U	0.035 U	0.037 U	0.072 U	0.035 U	0.013 J	0.035 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.9 U	1.9 U	0.035 U	3.8 U	0.036 U	0.035 U	0.037 U	0.072 U	0.035 U	0.035 U	0.035 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.57 J	1.9 UJ	0.035 U	3.8 U	0.036 U	0.035 U	0.037 U	0.87 J	0.035 U	0.035 U	0.035 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	9.17 J	15	0.021 J	30*	0.036 U	0.035 U	0.037 U	0.87 J	0.035 U	0.013 J	0.035 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SQ)	MDEQ 2013 UPDATED CSAT	SW9-09-W2S1 8 - 10 01/17/02 SW9-09W2S1-8-10DL	SW9-09-W2S1 10 - 12 01/31/02 SW9-09-W2S1(10-12)DL	SW9-09-W2S2 2 - 4 01/03/02 SW9-09W2S2-2-4DL	SW9-09-W2S2 4 - 6 01/29/02 SW9-09W2S2-(4-6)DL	SW9-09-W2S2 6 - 8 01/29/02 SW9-09W2S2-(6-8)DL	SW9-09-W2S2 8 - 10 01/29/02 SW9-09W2S2-(8-10)DL	SW9-09-W2S2 10 - 12 01/29/02 SW9-09W2S2-(10-12)DL	SW9-09-W2S2 12 - 14 01/29/02 SW9-09W2S2-(12-14)DL	SW9-09-W2S2 14 - 16 02/18/02 SW9-09W2S2-14-16DL	SW9-09-W2S3 0 - 2 01/23/02 SW9-09W2S3-0-2
Detected PCBs																				
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	2 U	3.7 U	1.9 U	4 U	4 U	4.2 U	4.2 U	2.1 U	0.035 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	2 U	3.7 U	1.9 U	4 U	4 U	4.2 U	4.2 U	2.1 U	0.035 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	2 U	32	1.9 U	4 U	4 U	16	4.2 U	2.1 U	0.035 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	35	18	3.7 U	14	60	45	4.2 U	33	9.3	0.023 J
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 U	2 U	3.7 U	1.9 U	4 U	4 U	4.2 U	4.2 U	2.1 U	0.035 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	4.1 UJ	2 U	3.7 U	1.9 U	4 U	4 U	4.2 U	4.2 U	2.1 U	0.035 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	35*	18*	32*	14	60*	45*	16*	33*	9.3	0.023 J

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-W2S3 2 - 4 01/23/02 SW9-09W2S3-(2-4)	SW9-09-W2S3 4 - 6 01/23/02 SW9-09-W2S3(4-6)	SW9-09-W2S3 6 - 8 01/23/02 SW9-09-W2S3(6-8)	SW9-09-W2S3 8 - 10 01/23/02 SW9-09-W2S3(8-10)	SW9-09-W2S3 10 - 12 02/19/02 SW9-09W2S3-10-12	SW9-09-W2S3 12 - 14 02/19/02 SW9-09W2S3-12-14	SW9-09-W3 0.5 - 2 12/20/01 SW9-09-W3-S(0-2)	SW9-09-W3 2 - 4 12/20/01 SW9-09-W3-S(2-4)	SW9-09-W3 4 - 6 02/12/02 SW9-09W3-4-6	SW9-09-W3 6 - 8 02/12/02 SW9-09W3-6-8	SW9-09-W3 8 - 10 02/12/02 SW9-09W3-8-10	SW9-09-W3 10 - 12 02/12/02 SW9-09W3-10-12DL
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.035 U	0.035 U	0.036 U	0.035 U	0.046 U	0.035 U	0.036 U	0.036 U	0.036 U	0.037 U	1.9 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.035 U	0.035 U	0.036 U	0.035 U	0.046 U	0.035 U	0.036 U	0.036 U	0.036 U	0.037 U	1.9 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.035 U	0.035 U	0.036 U	0.035 U	0.046 U	0.035 U	0.036 U	0.036 U	0.036 U	0.037 U	1.9 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.011 J	0.035 U	0.024 J	0.039	0.041 J	0.035 U	0.036 U	0.036 U	0.011 J	0.019 J	7.1
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.035 U	0.035 U	0.036 U	0.035 U	0.046 U	0.035 U	0.036 U	0.036 U	0.036 U	0.037 U	1.9 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.035 U	0.035 U	0.035 U	0.036 U	0.035 U	0.014 J	0.035 U	0.036 U	0.036 U	0.036 U	0.037 U	1.9 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.035 U	0.011 J	0.035 U	0.024 J	0.039	0.055 J	0.035 U	0.036 U	0.036 U	0.011 J	0.019 J	7.1

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-W3N1 0.5 - 2 01/17/02 SW9-09W3N1-0-2	SW9-09-W3N1 2 - 4 02/14/02 SW9-09W3N1-2-4	SW9-09-W3N1 4 - 6 02/14/02 SW9-09W3N1-4-6	SW9-09-W3N1 6 - 8 02/14/02 SW9-09W3N1-6-8	SW9-09-W3N1 8 - 10 02/14/02 SW9-09W3N1-8-10	SW9-09-W3N1 10 - 12 02/14/02 SW9-09W3N1-10-12	SW9-09-W3N2 0.5 - 2 02/18/02 SW9-09W3N2-0-2	SW9-09-W3N2 2 - 4 02/18/02 SW9-09W3N2-2-4	SW9-09-W3N2 4 - 6 02/18/02 SW9-09W3N2-4-6	SW9-09-W3N2 6 - 8 02/18/02 SW9-09W3N2-6-8	SW9-09-W3S1 0 - 2 01/17/02 SW9-09W3S1-0-2	SW9-09-W3S1 2 - 4 01/17/02 SW9-09W3S1-2-4
Detected PCBs																						
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.062	0.035 U	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.036 U	0.035 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 UJ	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.036 U	0.035 U	0.036 UJ
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.035 U	0.036 U	0.036 U	0.039 U	0.036 U	0.036 U	0.036 U	0.037 U	0.062	0.035 U	0.036 U

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	SW9-09-W3S1 4 - 6 01/17/02 SW9-09W3S1-4-6	SW9-09-W3S1 6 - 8 01/17/02 SW9-09W3S1-6-8	SW9-09-W3S1 8 - 10 01/17/02 SW9-09W3S1-(8-10)	SW9-09-W3S2 0 - 2 01/17/02 SW9-09W3S2-0-2	SW9-09-W3S2 2 - 4 01/17/02 SW9-09W3S2-(2-4)	SW9-09-W3S2 4 - 6 01/17/02 SW9-09W3S2-(4-6)	SW9-09-W3S2 6 - 8 02/04/02 SW9-09W3S2-6-8	SW9-09-W3S2 8 - 10 02/04/02 SW9-09W3S2-8-10	SW9-09-W3S2 10 - 12 02/04/02 SW9-09W3S2-10-12	SW9-09-W3S2 12 - 14 02/04/02 SW9-09W3S2-12-14	SW9-10 0 - 2 06/27/01 SW9-10-S(02)062701DL
Detected PCBs																					
Aroclor-1016	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.68 U
Aroclor-1232	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.68 U
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.68 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.019 J	0.018 J	0.0092 J	0.037 U	0.037 U	0.039	0.037 U	0.037 U	0.01 J	3
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.68 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.036 U	0.036 U	0.036 U	0.036 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	0.68 U
Total PCBs	- -	- -	16*	- -	- -	- -	810	6,500	**16,000**	- -	0.036 U	0.019 J	0.018 J	0.0092 J	0.037 U	0.037 U	0.039	0.037 U	0.037 U	0.01 J	3

See Notes on last page.

Table 4-29 W-09 PCB Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
R	Rejected data
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BCC-34 0.7 - 2 06/02/04 BCC-34-S(1-2)	BCC-34-2 0.5 - 2.5 07/27/04 BCC342S0.5-2.5DL	BCC-44 0.7 - 2 06/01/04 BCC-44-S(1-2)	BCC-51 0.7 - 2 06/03/04 BCC-51-S(1-2)DL	BCC-51 6 - 8 06/03/04 BCC-51-S(6-8)	BCC-52 0 - 2 06/03/04 BCC-52-S(0-2)	BCC-52 6 - 8 06/03/04 BCC-52-S(6-8)DL	BCC-53 0 - 2 06/03/04 BCC-53-S(0-2)DL	BCC-53 6 - 8 06/03/04 BCC-53-S(6-8)DL	BCC-54 0 - 2 06/03/04 BCC-54-S(0-2)	BCC-54 6 - 8 06/03/04 BCC-54-S(6-8)	BCC-55 0 - 2 06/03/04 BCC-55-S(0-2)DL	BCC-55 6 - 8 06/03/04 BCC-55-S(6-8)DL	BCC-58 0.6 - 2 06/03/04 BCC-58-S(1-2)	BCC-58 6 - 8 06/03/04 BCC-58-S(6-8)
Detected Volatile Organics																					
Acetone	73,000	15	42	34	160,000	NA	0.018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	840	0.1	0.1	4	45	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Butanone	700,000	260	760	44	35,000	NA	0.018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbon Disulfide	43,000	16	46	- -	1,600	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CFC-11	260,000	52	150	- -	110,000	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chlorobenzene	14,000	2	2	0.5	920	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	- -	- -	- -	- -	- -	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane	87,000	18	50	15	2,500	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichloromethane	5,800	0.1	0.1	30	700	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	80,000	91	260	3.2	2,000	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl acetate	- -	- -	- -	- -	- -	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylcyclohexane	- -	- -	- -	- -	- -	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	NA	0.018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	1,900	2.7	2.7	2.1	3,300	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	930	0.1	0.1	1.2	210	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Toluene	160,000	16	16	5.4	3,300	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	NA	0.0021 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	660	0.1	0.1	4	14	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	NA	0.0045 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	NA	0.0089 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Detected Semivolatile Organics																					
1,1'-Biphenyl	- -	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	0.098 J	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.059 J	7.6 U	0.36 U	0.36 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.19 J [0.37 U]	0.13 J	0.49 U	7.6 U	0.36 U	0.15 J
2-Methylphenol	- -	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 UJ	3.9 UJ	0.37 U [0.37 UJ]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
4-Methylphenol	- -	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 UJ]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Acenaphthene	130,000	300	880	8.7	97,000	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.065 J	7.6 U	0.36 U	0.36 U
Acenaphthylene	5,200	5.9	17	- -	2,700	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Anthracene	730,000	41	41	- -	1,600,000	R	NA	R	2 U	0.35 U	0.034 J	0.32 J	3.6 U	3.9 U	0.37 U [0.37 U]	0.023 J	0.18 J	7.6 U	0.36 U	0.36 U
Benzaldehyde	- -	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 UJ]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Benzo(a)anthracene	80	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.09 J	0.92 J	3.6 U	0.68 J	0.072 J [0.036 J]	0.055 J	0.47 J	7.6 U	0.36 U	0.08 J
Benzo(a)pyrene	8	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.096 J	0.63 J	3.6 U	1.6 J	0.067 J [0.042 J]	0.098 J	0.34 J	7.6 U	0.36 U	0.08 J
Benzo(b)fluoranthene	80	- -	- -	- -	- -	0.016 J	NA	R	2 U	0.35 U	0.12 J	1 J	3.6 U	2.2 J	0.086 J [0.049 J]	0.11 J	0.61	0.47 J	0.36 U	0.13 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.072 J	0.56 J	3.6 U	1.5 J	0.057 J [0.033 J]	0.093 J	0.33 J	7.6 U	0.36 U	0.077 J
Benzo(k)fluoranthene	800	- -	- -	- -	- -	R	NA	R	R	0.35 UJ	0.043 J	0.34 J	3.6 U	1.1 J	0.031 J [0.021 J]	0.034 J	0.19 J	7.6 U	0.36 U	0.047 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	R	NA	0.44 J	2 U	0.35 U	0.036 J	1.5 U	3.6 U	0.74 J	0.046 J [0.37 U]	0.042 J	0.085 J	0.42 J	0.034 J	0.36 U
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Carbazole	2,400	9.4	39	1.1	- -	R	NA	R	2 U	0.35 U	0.38 U	0.15 J	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.07 J	7.6 U	0.36 U	0.36 U
Chrysene	8,000	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.11 J	1.1 J	3.6 U	1.6 J	0.087 J [0.05 J]	0.089 J	0.54	0.34 J	0.36 U	0.12 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.019 J	7.6 U	0.36 U	0.36 U
Dibenzofuran	- -	- -	- -	1.7	160	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.046 J [0.37 U]	0.034 J	0.49 U	7.6 U	0.36 U	0.047 J
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Fluoranthene	130,000	730	730	5.5	890,000	0.03 J	NA	R	2 U	0.35 U	0.23 J	2.4	3.6 U	3.9 U	0.13 J [0.08 J]	0.086 J	1.2	0.92 J	0.36 U	0.12 J
Fluorene	87,000	390	890	5.3	150,000	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 U]	0.36 U	0.054 J	7.6 U	0.36 U	0.36 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	R	NA	R	2 U	0.35 U	0.062 J	0.5 J	3.6 U	1.2 J	0.039 J [0.03 J]	0.016 J	0.049 J	7.6 U	0.36 U	0.056 J
Phenanthrene	5,200	56	160	2.1	190	0.021 J	NA	R	2 U	0.35 U	0.12 J	1.3 J	3.6 U	3.9 U	0.14 J [0.049 J]	0.087 J	0.61	0.55 J	0.36 U	0.16 J
Phenol	230,000	88	260	9	- -	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.37 U [0.37 UJ]	0.36 U	0.49 U	7.6 U	0.36 U	0.36 U
Pyrene	84,000	480	480	- -	780,000	0.021 J	NA	R	2 U	0.35 U	0.19 J	1.8	3.6 U	0.74 J	0.11 J [0.07 J]	0.094 J	0.93	1.1 J	0.36 U	0.1 J
Naphthalene	52,000	35	100	0.73	350	R	NA	R	2 U	0.35 U	0.38 U	1.5 U	3.6 U	3.9 U	0.12 J [0.37 U]	0.081 J	0.49 U	7.6 U	0.36 U	0.1 J

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Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BCC-59	BCC-59	BCC-60	BCC-60	BCC-60-1	BCC-60-1	BCC-60-1	BCC-60-1	BCC-60-1	BCC-60-1	BCC-60-2	BCC-60-2	BCC-60-2	BCC-60-2
Sample Depth (ft BGS):						1.3 - 2.3	6 - 8	1.8 - 2.8	6 - 8	0.66 - 2.66	0.66 - 2.66	2 - 4	5 - 6	8 - 9	8 - 9	1.25 - 3.25	6 - 8	6 - 8	8 - 9
Date Collected:						06/02/04	06/02/04	06/01/04	06/01/04	07/23/04	07/23/04	07/26/04	07/23/04	07/23/04	07/23/04	07/23/04	07/23/04	07/23/04	07/23/04
Sample Name:						BCC-59-S(1-2)	BCC-59-S(6-8)	BCC-60-S(1-2)DL	BCC-60-S(6-8)	BCC-60-1-S(0.66-2.66)	BCC-60-1-S(0.66-2.66)DL	BCC601S2-4DL	BCC-60-1-S(5-6)DL	BCC-60-1-S(8-9)	BCC-60-1-S(8-9)DL	BCC-60-2-S(1.25-3.25)	BCC-60-2(6-8)	BCC-60-2(6-8)DL	BCC-60-2-S(8-9)
Detected Volatile Organics																			
Acetone	73,000	15	42	34	160,000	NA	NA	NA	NA	NA	0.02 U	0.018 U	0.017 U	NA	0.018 U	NA	NA	0.018 U	NA
Benzene	840	0.1	0.1	4	45	NA	NA	NA	NA	NA	0.00035 J	0.00028 J	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
2-Butanone	700,000	260	760	44	35,000	NA	NA	NA	NA	NA	0.02 U	0.018 U	0.017 U	NA	0.018 U	NA	NA	0.018 U	NA
Carbon Disulfide	43,000	16	46	- -	1,600	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
CFC-11	260,000	52	150	- -	110,000	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
Chlorobenzene	14,000	2	2	0.5	920	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Cyclohexane	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,1-Dichloroethane	87,000	18	50	15	2,500	NA	NA	NA	NA	NA	0.0031 J	0.0025 J	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Dichloromethane	5,800	0.1	0.1	30	700	NA	NA	NA	NA	NA	0.0037 J	0.0024 J	0.0029 J	NA	0.0029 J	NA	NA	0.0018 J	NA
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Isopropylbenzene	80,000	91	260	3.2	2,000	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Methyl acetate	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	NA	NA	NA	NA	NA	0.02 U	0.018 U	0.017 U	NA	0.018 U	NA	NA	0.018 U	NA
Styrene	1,900	2.7	2.7	2.1	3,300	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Tetrachloroethene	930	0.1	0.1	1.2	210	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Toluene	160,000	16	16	5.4	3,300	NA	NA	NA	NA	NA	0.005 U	0.00045 J	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	NA	NA	NA	NA	NA	0.0088	0.0019 J	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Trichloroethene	660	0.1	0.1	4	14	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	NA	NA	NA	NA	NA	0.005 U	0.0046 U	0.0042 U	NA	0.0045 U	NA	NA	0.0045 U	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	NA	NA	NA	NA	NA	0.01 U	0.0091 U	0.0083 U	NA	0.009 U	NA	NA	0.0089 U	NA
Detected Semivolatile Organics																			
1,1'-Biphenyl	- -	- -	- -	- -	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	0.38 U	0.38 U	3.6	0.37 U	0.39 U	NA	2.5	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	0.017 J	0.38 U	0.078 J	0.37 U	0.39 U	NA	0.25 J	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
2-Methylphenol	- -	- -	- -	- -	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
4-Methylphenol	- -	- -	- -	- -	- -	0.38 U	0.38 U	0.18 J	0.37 U	0.39 U	NA	0.42 J	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Acenaphthene	130,000	300	880	8.7	97,000	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 UJ	NA	0.38 U
Acenaphthylene	5,200	5.9	17	- -	2,700	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 UJ	NA	0.38 U
Anthracene	730,000	41	41	- -	1,600,000	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzaldehyde	- -	- -	- -	- -	- -	0.38 U	0.38 UJ	0.94 U	0.37 UJ	0.39 U	NA	1.9 UJ	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzo(a)anthracene	80	- -	- -	- -	- -	0.061 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzo(a)pyrene	8	- -	- -	- -	- -	0.055 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzo(b)fluoranthene	80	- -	- -	- -	- -	0.084 J	0.38 UJ	0.039 J	0.37 UJ	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	0.038 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Benzo(k)fluoranthene	800	- -	- -	- -	- -	0.022 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	0.062 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Carbazole	2,400	9.4	39	1.1	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Chrysene	8,000	- -	- -	- -	- -	0.068 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Dibenzofuran	- -	- -	- -	1.7	160	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 UJ	NA	0.38 U
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 UJ	NA	0.38 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Fluoranthene	130,000	730	730	5.5	890,000	0.089 J	0.38 U	0.04 J	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Fluorene	87,000	390	890	5.3	150,000	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	0.041 J	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Phenanthrene	5,200	56	160	2.1	190	0.05 J	0.38 U	0.078 J	0.37 U	0.39 U	NA	0.28 J	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Phenol	230,000	88	260	9	- -	0.38 U	0.38 U	0.94 U	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Pyrene	84,000	480	480	- -	780,000	0.084 J	0.38 U	0.04 J	0.37 U	0.39 U	NA	1.9 U	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U
Naphthalene	52,000	35	100	0.73	350	0.38 U	0.38 U	0.069 J	0.37 U	0.39 U	NA	0.22 J	NA	0.38 U	NA	0.37 U	0.38 U	NA	0.38 U

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BCC-60B 2 - 4 07/26/04 BCC60BS2-4DL	BCC-60B 6 - 8 07/26/04 BCC60BS6-8DL	BCC-60B 8 - 10 07/26/04 BCC60BS8-10DL	BCC-61 0 - 2 06/01/04 BCC-61-S(0-2)DL	BCC-61 6 - 8 06/01/04 BCC-61-S(6-8)R2	BCC-62 0 - 2 06/03/04 BCC-62-S(0-2)	BCC-62 6 - 8 06/03/04 BCC-62-S(6-8)	BCC-75 0 - 2 06/03/04 BCC-75-S(0-2)DL	BCC-75 5 - 7 06/03/04 BCC-75-S(5-7)	BW9-01 0 - 2 07/16/01 BW9-01-S(0-2)-N	BW9-01 8 - 10 07/16/01 BW9-01-S(8-10)-N	BW9-01-E3 2 - 4 08/02/04 BW9-01-E3-S(2-4)-080204DL	BW9-01-E3 8 - 10 08/02/04 BW9-01-E3-S(8-10)-080204DL
Detected Volatile Organics																		
Acetone	73,000	15	42	34	160,000	0.069 U	0.017 U	0.017 U	NA	NA	NA	NA	NA	NA	0.0029 U	0.0032 J	0.0068 J	0.0061 J
Benzene	840	0.1	0.1	4	45	0.0042 J	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00091 U	0.0008 J	0.00044 J	0.00034 J
2-Butanone	700,000	260	760	44	35,000	0.021	0.017 U	0.017 U	NA	NA	NA	NA	NA	NA	0.0038 U	0.0027 U	0.024 U	0.02 U
Carbon Disulfide	43,000	16	46	- -	1,600	0.0049 J	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0011 U	0.00078 U	0.0059 U	0.0051 U
CFC-11	260,000	52	150	- -	110,000	0.011 U	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.0015 U	0.0011 U	0.012 U	0.01 U
Chlorobenzene	14,000	2	2	0.5	920	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00073 U	0.00052 U	0.0059 U	0.0051 U
Cyclohexane	- -	- -	- -	- -	- -	0.0012 J	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.0014 U	0.001 U	0.012 U	0.01 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.011 UJ	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.0022 UJ	0.0016 U	0.012 U	0.01 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0053 UJ	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00099 U	0.00071 U	0.0059 U	0.0032 J
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0053 UJ	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00094 U	0.00067 U	0.0059 U	0.0051 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00081 U	0.00058 U	0.0059 U	0.0051 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0017 U	0.0012 U	0.0059 U	0.0051 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0012 U	0.00084 U	0.0059 U	0.0051 U
Dichloromethane	5,800	0.1	0.1	30	700	0.002 J	0.0019 J	0.0043 U	NA	NA	NA	NA	NA	NA	0.0018 U	0.0013 U	0.0059 U	0.0051 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0023 J	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00083 U	0.00059 U	0.0059 U	0.00068 J
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.00098 U	0.0007 U	0.0059 U	0.0051 U
Methyl acetate	- -	- -	- -	- -	- -	0.011 U	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.0015 UJ	0.0011 UJ	0.012 U	0.01 U
Methylcyclohexane	- -	- -	- -	- -	- -	0.0013 J	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.00087 J	0.00059 U	0.012 U	0.01 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.021 U	0.017 U	0.017 U	NA	NA	NA	NA	NA	NA	0.0027 U	0.0019 U	0.024 U	0.02 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0007 U	0.0005 U	0.0059 U	0.0051 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0017 U	0.0012 U	0.0059 U	0.0051 U
Toluene	160,000	16	16	5.4	3,300	0.0097	0.00027 J	0.0043 U	NA	NA	NA	NA	NA	NA	0.00074 U	0.00053 U	0.00082 J	0.00066 J
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0053 UJ	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0012 U	0.00089 U	0.0011 J	0.00092 J
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0013 U	0.00092 U	0.0059 U	0.0051 U
Trichloroethene	660	0.1	0.1	4	14	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0011 U	0.00076 U	0.0059 U	0.0051 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0053 U	0.0042 U	0.0043 U	NA	NA	NA	NA	NA	NA	0.0069 J	0.0082	0.0059 U	0.0051 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.012	0.0083 U	0.0087 U	NA	NA	NA	NA	NA	NA	0.0027 U	0.0019 U	0.012 U	0.0054 J
Detected Semivolatile Organics																		
1,1'-Biphenyl	- -	- -	- -	- -	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.15 U	1.7 U	NA	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.088 U	0.99 U	NA	NA
2-Methylnaphthalene	26,000	57	170	4.2	1,800	NA	NA	NA	0.91 U	0.13 J	0.041 J	0.052 J	1.7 U	0.38 U	0.33 J	0.87 J	NA	NA
2-Methylphenol	- -	- -	- -	- -	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.05 U	0.57 U	NA	NA
4-Methylphenol	- -	- -	- -	- -	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.051 U	0.58 U	NA	NA
Acenaphthene	130,000	300	880	8.7	97,000	NA	NA	NA	0.12 J	0.14 J	0.018 J	0.018 J	1.7 U	0.38 U	0.056 U	2.2 J	NA	NA
Acenaphthylene	5,200	5.9	17	- -	2,700	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.051 U	0.58 U	NA	NA
Anthracene	730,000	41	41	- -	1,600,000	NA	NA	NA	0.34 J	0.21 J	0.046 J	0.036 J	1.7 U	0.38 U	0.054 J	3.4 J	NA	NA
Benzaldehyde	- -	- -	- -	- -	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.19 U	2.1 U	NA	NA
Benzo(a)anthracene	80	- -	- -	- -	- -	NA	NA	NA	0.61 J	0.42	0.15 J	0.12 J	0.2 J	0.38 U	0.32 J	12	NA	NA
Benzo(a)pyrene	8	- -	- -	- -	- -	NA	NA	NA	0.5 J	0.33 J	0.2 J	0.099 J	0.2 J	0.38 U	0.22 J	8.8*	NA	NA
Benzo(b)fluoranthene	80	- -	- -	- -	- -	NA	NA	NA	0.63 J	0.66 J	0.21 J	0.12 J	0.22 J	0.38 U	0.35 J	10	NA	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	NA	NA	NA	0.26 J	0.29 J	0.13 J	0.071 J	1.7 U	0.38 U	0.16 J	4.8	NA	NA
Benzo(k)fluoranthene	800	- -	- -	- -	- -	NA	NA	NA	0.2 J	0.17 J	0.11 J	0.054 J	0.11 J	0.38 U	0.1 J	4.5	NA	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	NA	NA	NA	0.91 U	0.14 J	0.046 J	0.041 J	1.7 U	0.045 J	3.2 J	0.67 U	NA	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.056 U	0.63 U	NA	NA
Carbazole	2,400	9.4	39	1.1	- -	NA	NA	NA	0.093 J	0.097 J	0.025 J	0.38 U	1.7 U	0.38 U	0.057 U	1.4 J	NA	NA
Chrysene	8,000	- -	- -	- -	- -	NA	NA	NA	0.64 J	0.51	0.2 J	0.12 J	0.3 J	0.38 U	0.55	14	NA	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	NA	NA	NA	0.11 J	0.37 UJ	0.37 U	0.38 U	1.7 U	0.38 U	0.056 U	1.4 J	NA	NA
Dibenzofuran	- -	- -	- -	1.7	160	NA	NA	NA	0.059 J	0.11 J	0.37 U	0.019 J	1.7 U	0.38 U	0.058 J	1 J	NA	NA
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.18 U	2 U	NA	NA
Di-n-Butylphthalate	87,000	960	2,700	11	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.16 U	1.9 U	NA	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	NA	NA	NA	0.91 U	0.37 UJ	0.37 U	0.38 U	1.7 U	0.38 U	0.059 U	0.67 U	NA	NA
Fluoranthene	130,000	730	730	5.5	890,000	NA	NA	NA	1.8	1.4	0.32 J	0.23 J	0.44 J	0.38 U	0.59	28	NA	NA
Fluorene	87,000	390	890	5.3	150,000	NA	NA	NA	0.15 J	0.12 J	0.017 J	0.021 J	1.7 U	0.38 U	0.053 U	1.5 J	NA	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	NA	NA	NA	0.27 J	0.21 J	0.11 J	0.064 J	1.7 U	0.38 U	0.11 J	4.5	NA	NA
Phenanthrene	5,200	56	160	2.1	190	NA	NA	NA	1.5	0.9	0.17 J	0.14 J	0.3 J	0.38 U	0.4	16	NA	NA
Phenol	230,000	88	260	9	- -	NA	NA	NA	0.91 U	0.37 U	0.37 U	0.38 U	1.7 U	0.38 U	0.096 J	0.61 U	NA	NA
Pyrene	84,000	480	480	- -	780,000	NA	NA	NA	1.5	1	0.28 J	0.2 J	0.4 J	0.38 U	0.7	28	NA	NA
Naphthalene	52,000	35	100	0.73	350	NA	NA	NA	0.91 U	0.12 J	0.021 J	0.035 J	1.7 U	0.38 U	0.11 J	0.79 J	NA	NA

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-01-E3 10 - 12 08/02/04 BW9-01-E3-S(10-12)-080204DL	BW9-01-E4 2 - 4 08/03/04 BW9-01-E4-S(2-4)	BW9-01-E4 8 - 10 08/03/04 BW9-01-E4-S(8-10)DL	BW9-01-E4 10 - 12 08/03/04 BW9-01-E4-S(10-12)DL	BW9-01-N1E3 2 - 4 08/03/04 BW9-01-N1E3-S(2-4)DL	BW9-01-N1E3 8 - 10 08/03/04 BW9-01-N1E3-S(8-10)DL	BW9-01-N1E3 10 - 12 08/03/04 BW9-01-N1E3-S(10-12)DL	BW9-01-S1E3 2 - 4 08/03/04 BW9-01-S1E3-S(2-4)DL	BW9-01-S1E3 6.5 - 8 08/03/04 BW9-01-S1E3-S(6.5-8)	BW9-01-S1E3 10 - 12 08/03/04 BW9-01-S1E3-S(10-12)	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)
Detected Volatile Organics																
Acetone	73,000	15	42	34	160,000	0.0063 J	0.0095 J	0.026 UJ	0.0062 J	0.019 U	0.0026 J	0.017 U	0.021 U	0.023 U	0.0066 J	NA
Benzene	840	0.1	0.1	4	45	0.00056 J	0.00096 J	0.00036 J	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.00035 J	0.00046 J	0.0058 U	NA
2-Butanone	700,000	260	760	44	35,000	0.021 U	0.0019 J	0.026 UJ	0.025 U	0.019 U	0.02 U	0.017 U	0.021 U	0.023 U	0.023 U	NA
Carbon Disulfide	43,000	16	46	- -	1,600	0.0053 U	0.0055 U	0.003 J	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
CFC-11	260,000	52	150	- -	110,000	0.011 U	0.011 U	0.013 UJ	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.012 U	0.012 U	NA
Chlorobenzene	14,000	2	2	0.5	920	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Cyclohexane	- -	- -	- -	- -	- -	0.011 U	0.011 U	0.013 UJ	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.012 U	0.012 U	NA
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.011 U	0.011 U	0.013 UJ	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.012 U	0.012 U	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0053 U	0.0055 U	0.0025 J	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.013	0.0023 J	NA
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.00085 J	0.0058 U	NA
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Dichloromethane	5,800	0.1	0.1	30	700	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0053 U	0.0055 U	0.00094 J	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0034 J	0.00091 J	NA
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0012 J	0.0058 U	NA
Methyl acetate	- -	- -	- -	- -	- -	0.011 U	0.011 U	0.013 UJ	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.012 U	0.012 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	0.011 U	0.011 U	0.013 UJ	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.012 U	0.012 U	NA
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.021 U	0.022 U	0.026 UJ	0.025 U	0.019 U	0.02 U	0.017 U	0.021 U	0.023 U	0.0061 J	NA
Styrene	1,900	2.7	2.7	2.1	3,300	0.0053 U	0.00083 J	0.00068 J	0.0062 U	0.0048 U	0.0049 U	0.00039 J	0.00076 J	0.0058 U	0.0058 U	NA
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Toluene	160,000	16	16	5.4	3,300	0.00084 J	0.0014 J	0.001 J	0.00048 J	0.0048 U	0.0049 U	0.0043 U	0.00053 J	0.0012 J	0.00041 J	NA
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0053 U	0.0011 J	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0046 J	0.0058 U	0.0058 U	NA
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Trichloroethene	660	0.1	0.1	4	14	0.0053 U	0.0005 J	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.00051 J	0.0058 U	0.0058 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0053 U	0.0055 U	0.0065 UJ	0.0062 U	0.0048 U	0.0049 U	0.0043 U	0.0053 U	0.0058 U	0.0058 U	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.011 U	0.011 U	0.0068 J	0.012 U	0.0097 U	0.0098 U	0.0087 U	0.011 U	0.045	0.0097 J	NA
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.43
2-Methylphenol	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
4-Methylphenol	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Acenaphthene	130,000	300	880	8.7	97,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.23 J
Acenaphthylene	5,200	5.9	17	- -	2,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Anthracene	730,000	41	41	- -	1,600,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.24 J
Benzaldehyde	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Benzo(a)anthracene	80	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.47
Benzo(a)pyrene	8	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 J
Benzo(b)fluoranthene	80	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.42
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.14 J
Benzo(k)fluoranthene	800	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.22 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.15 J
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Carbazole	2,400	9.4	39	1.1	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.17 J
Chrysene	8,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.6
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Dibenzofuran	- -	- -	- -	1.7	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.3 J
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.36 U
Fluoranthene	130,000	730	730	5.5	890,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4
Fluorene	87,000	390	890	5.3	150,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.21 J
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.14 J
Phenanthrene	5,200	56	160	2.1	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2
Phenol	230,000	88	260	9	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.061 J
Pyrene	84,000	480	480	- -	780,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.1
Naphthalene	52,000	35	100	0.73	350	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.53

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-02 0.9 - 2 07/17/01 BW9-02-S(0-2)DL	BW9-02 8 - 10 07/17/01 BW9-02-S(8-10)	BW9-02 8 - 10 07/17/01 BW9-02-S(8-10)DL	BW9-03 0.7 - 2 07/28/03 BW903S(0-2)DL	BW9-03 3 - 5 07/28/03 BW903S(3-5)	BW9-03 3 - 5 07/28/03 BW903S(3-5)DL	BW9-03 8 - 10 07/28/03 BW903S(8-10)	BW9-03 8 - 10 07/28/03 BW903S(8-10)DL	BW9-04 0.3 - 2 07/22/03 BW904S(0-2)	BW9-04 0.3 - 2 07/22/03 BW904S(0-2)DL	BW9-04 4.5 - 6.5 07/22/03 BW904S(4.5-6.5)	BW9-04 4.5 - 6.5 07/22/03 BW904S(4.5-6.5)DL	BW9-05 1.5 - 2.5 07/22/03 BW905S(0-2)	BW9-05 1.5 - 2.5 07/22/03 BW905S(0-2)DL	BW9-05 8 - 10 07/22/03 BW905S(8-10)	BW9-05 8 - 10 07/22/03 BW905S(8-10)DL
Detected Volatile Organics																						
Acetone	73,000	15	42	34	160,000	0.018 UJ	NA	0.017 UJ	0.023 U	NA	0.024 U	NA	0.019 U	NA	0.018 U	NA	0.019 U	NA	0.025 U	NA	0.024 U
Benzene	840	0.1	0.1	4	45	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
2-Butanone	700,000	260	760	44	35,000	0.018 U	NA	0.017 U	0.023 U	NA	0.024 U	NA	0.019 U	NA	0.018 U	NA	0.019 U	NA	0.025 U	NA	0.024 U
Carbon Disulfide	43,000	16	46	- -	1,600	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
CFC-11	260,000	52	150	- -	110,000	0.0091 U	NA	0.0084 U	0.012 U	NA	0.012 U	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
Chlorobenzene	14,000	2	2	0.5	920	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Cyclohexane	- -	- -	- -	- -	- -	0.0091 U	NA	0.0084 U	0.012 U	NA	0.012 U	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.0091 U	NA	0.0084 U	0.012 UJ	NA	0.012 UJ	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0046 U	NA	0.0042 U	0.0058 UJ	NA	0.0059 UJ	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0046 U	NA	0.0042 U	0.0058 UJ	NA	0.0059 UJ	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0012 J	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0046 U	NA	0.0042 U	0.00079 J	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Dichloromethane	5,800	0.1	0.1	30	700	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0018 J	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.0028 J
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Methyl acetate	- -	- -	- -	- -	- -	0.0091 UJ	NA	0.0084 UJ	0.012 U	NA	0.012 U	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
Methylcyclohexane	- -	- -	- -	- -	- -	0.0091 U	NA	0.0084 U	0.012 U	NA	0.012 U	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.018 U	NA	0.017 U	0.023 U	NA	0.024 U	NA	0.019 U	NA	0.018 U	NA	0.019 U	NA	0.025 U	NA	0.024 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Toluene	160,000	16	16	5.4	3,300	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0046 U	NA	0.0042 U	0.0058 UJ	NA	0.0059 UJ	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0015 J	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Trichloroethene	660	0.1	0.1	4	14	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0046 U	NA	0.0042 U	0.0058 U	NA	0.0059 U	NA	0.0047 U	NA	0.0046 U	NA	0.0047 U	NA	0.0063 U	NA	0.006 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.0091 U	NA	0.0084 U	0.012 U	NA	0.012 U	NA	0.0094 U	NA	0.0092 U	NA	0.0093 U	NA	0.013 U	NA	0.012 U
Detected Semivolatile Organics																						
1,1'-Biphenyl	- -	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
2-Methylnaphthalene	26,000	57	170	4.2	1,800	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
2-Methylphenol	- -	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
4-Methylphenol	- -	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Acenaphthene	130,000	300	880	8.7	97,000	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Acenaphthylene	5,200	5.9	17	- -	2,700	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Anthracene	730,000	41	41	- -	1,600,000	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzaldehyde	- -	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzo(a)anthracene	80	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 UJ	NA	0.38 UJ	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzo(a)pyrene	8	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzo(b)fluoranthene	80	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Benzo(k)fluoranthene	800	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	NA	0.35 U	NA	3.1 J	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Carbazole	2,400	9.4	39	1.1	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Chrysene	8,000	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 UJ	NA	0.38 UJ	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Dibenzofuran	- -	- -	- -	1.7	160	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Di-n-Butylphthalate	87,000	960	2,700	11	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Fluoranthene	130,000	730	730	5.5	890,000	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Fluorene	87,000	390	890	5.3	150,000	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Phenanthrene	5,200	56	160	2.1	190	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Phenol	230,000	88	260	9	- -	NA	0.35 U	NA	0.95 J	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA
Pyrene	84,000	480	480	- -	780,000	NA	0.35 U	NA	8.8 U	0.35 UJ	NA	0.38 UJ	NA	0.38 U	NA	0.37 U	NA	0.02 J	NA	0.36 U	NA
Naphthalene	52,000	35	100	0.73	350	NA	0.35 U	NA	8.8 U	0.35 U	NA	0.38 U	NA	0.38 U	NA	0.37 U	NA	0.35 U	NA	0.36 U	NA

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-05 10 - 12 07/22/03 BW905S(10-12)	BW9-05 10 - 12 07/22/03 BW905S(10-12)DL	BW9-06 0.3 - 2 07/22/03 BW906S(0-2)DL	BW9-06 0.3 - 2 07/22/03 BW906S(0-2)R2	BW9-06 6 - 8 07/22/03 BW906S(6-8)	BW9-06 6 - 8 07/22/03 BW906S(6-8)DL	BW9-11 2 - 4 07/31/03 BW911S(0-2)DL	BW9-11 5 - 7 07/31/03 BW911S(5-7)DL	BW9-11 7 - 9 07/31/03 BW911S(7-9)DL	BW9-12 0.5 - 2 07/30/03 BW912S(0-2)	BW9-12 0.5 - 2 07/30/03 BW912S(0-2)DL	BW9-12 8 - 10 07/30/03 BW912S(8-10)	BW9-12 8 - 10 07/30/03 BW912S(8-10)DL	BW9-12 20 - 22 07/30/03 BW912S(20-22)	BW9-12 20 - 22 07/30/03 BW912S(20-22)DL
Detected Volatile Organics																				
Acetone	73,000	15	42	34	160,000	NA	0.0042 J	0.026 U	NA	NA	0.02 U	0.013 J	0.023	0.018 J	NA	0.023 U	NA	0.026 U	NA	0.044
Benzene	840	0.1	0.1	4	45	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.00037 J	0.0045 UJ	0.00044 J	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
2-Butanone	700,000	260	760	44	35,000	NA	0.024 U	0.026 U	NA	NA	0.02 U	0.0023 J	0.0048 J	0.0044 J	NA	0.023 U	NA	0.026 U	NA	0.02 U
Carbon Disulfide	43,000	16	46	- -	1,600	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.00042 J	0.00041 J	0.0012 J	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
CFC-11	260,000	52	150	- -	110,000	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0093 U	NA	0.012 U	NA	0.013 U	NA	0.01 U
Chlorobenzene	14,000	2	2	0.5	920	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 UJ	0.0045 UJ	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Cyclohexane	- -	- -	- -	- -	- -	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0011 J	NA	0.012 U	NA	0.013 U	NA	0.01 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0093 UJ	NA	0.012 U	NA	0.013 UJ	NA	0.01 UJ
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 UJ	NA	0.0058 U	NA	0.0064 UJ	NA	0.005 UJ
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 UJ	NA	0.0058 U	NA	0.0064 UJ	NA	0.005 UJ
1,1-Dichloroethane	87,000	18	50	15	2,500	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Dichloromethane	5,800	0.1	0.1	30	700	NA	0.0024 J	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Isopropylbenzene	80,000	91	260	3.2	2,000	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.00053 J	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Methyl acetate	- -	- -	- -	- -	- -	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0093 U	NA	0.012 U	NA	0.013 U	NA	0.01 U
Methylcyclohexane	- -	- -	- -	- -	- -	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0093 U	NA	0.012 U	NA	0.013 U	NA	0.01 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	NA	0.024 U	0.026 U	NA	NA	0.02 U	0.019 U	0.018 U	0.019 U	NA	0.023 U	NA	0.026 U	NA	0.02 U
Styrene	1,900	2.7	2.7	2.1	3,300	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	R	NA	R	NA	R
Tetrachloroethene	930	0.1	0.1	1.2	210	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Toluene	160,000	16	16	5.4	3,300	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 UJ	0.0045 UJ	0.00061 J	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 UJ	NA	0.0058 U	NA	0.0064 UJ	NA	0.005 UJ
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Trichloroethene	660	0.1	0.1	4	14	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 UJ	0.0045 UJ	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	NA	0.0061 U	0.0064 U	NA	NA	0.0051 U	0.0049 U	0.0045 U	0.0046 U	NA	0.0058 U	NA	0.0064 U	NA	0.005 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	NA	0.012 U	0.013 U	NA	NA	0.01 U	0.0097 U	0.009 U	0.0093 U	NA	0.012 U	NA	0.013 U	NA	0.01 U
Detected Semivolatile Organics																				
1,1'-Biphenyl	- -	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.068 J	NA	0.071 J	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.062 J	NA
2-Methylnaphthalene	26,000	57	170	4.2	1,800	0.38 U	NA	NA	R	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.12 J	NA	0.21 J	NA
2-Methylphenol	- -	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.038 J	NA
4-Methylphenol	- -	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.073 J	NA
Acenaphthene	130,000	300	880	8.7	97,000	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.031 J	NA
Acenaphthylene	5,200	5.9	17	- -	2,700	0.38 U	NA	NA	R	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Anthracene	730,000	41	41	- -	1,600,000	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.032 J	NA	0.087 J	NA
Benzaldehyde	- -	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Benzo(a)anthracene	80	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.24 J	7.3 U	7.8 U	0.34 U	NA	0.21 J	NA	0.48	NA
Benzo(a)pyrene	8	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.3 J	NA	0.63	NA
Benzo(b)fluoranthene	80	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.21 J	7.3 U	7.8 U	0.34 U	NA	0.36	NA	0.7	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.22 J	NA	0.47	NA
Benzo(k)fluoranthene	800	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.2 J	NA	0.43	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Carbazole	2,400	9.4	39	1.1	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Chrysene	8,000	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.26 J	7.3 U	7.8 U	0.34 U	NA	0.28 J	NA	0.56	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.074 J	NA	0.19 J	NA
Dibenzofuran	- -	- -	- -	1.7	160	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.067 J	NA	0.1 J	NA
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Di-n-Butylphthalate	87,000	960	2,700	11	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Fluoranthene	130,000	730	730	5.5	890,000	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.41 J	0.91 J	7.8 U	0.34 U	NA	0.17 J	NA	0.33 J	NA
Fluorene	87,000	390	890	5.3	150,000	0.38 U	NA	NA	R	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.073 J	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.19 J	NA	0.45	NA
Phenanthrene	5,200	56	160	2.1	190	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.29 J	7.3 U	7.8 U	0.34 U	NA	0.23 J	NA	0.43	NA
Phenol	230,000	88	260	9	- -	0.38 U	NA	NA	0.36 U	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.35 U	NA	0.39 U	NA
Pyrene	84,000	480	480	- -	780,000	0.38 U	NA	NA	0.36 U	0.39 U	NA	0.39 J	1.7 J	7.8 U	0.34 U	NA	0.17 J	NA	0.37 J	NA
Naphthalene	52,000	35	100	0.73	350	0.38 U	NA	NA	R	0.39 U	NA	3.5 U	7.3 U	7.8 U	0.34 U	NA	0.092 J	NA	0.16 J	NA

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-16 14 - 16 09/09/03 BW9-16-S(14-16)DL	BW9-23 0 - 2 04/19/05 BW9-23-S(0-2)041905	BW9-23 8 - 10 04/19/05 BW9-23-S(8-10)041905	BW9-23 8 - 10 04/19/05 BW9-23-S(8-10)041905DL	BW9-24 0 - 2 04/19/05 BW9-24-S(0-2)041905	BW9-24 8 - 10 04/19/05 BW9-24-S(8-10)041905DL	BW9-25 0 - 2 04/19/05 BW9-25-S(0-2)041905	BW9-25 8 - 10 04/19/05 BW9-25-S(8-10)041905	BW9-25 8 - 10 04/19/05 BW9-25-S(8-10)041905R2	BW9-26 0 - 2 04/19/05 BW9-26-S(0-2)041905	BW9-26 8 - 10 04/19/05 BW9-26-S(8-10)041905
Detected Volatile Organics																
Acetone	73,000	15	42	34	160,000	0.021 U	0.67 U	NA	0.25 J	0.66 U	0.22 J	0.65 U	0.69 U	NA	0.65 U	0.69 U
Benzene	840	0.1	0.1	4	45	0.0051 U	0.044 U	NA	0.027 J	0.044 U	0.2 J	0.044 U	0.046 U	NA	0.043 U	0.046 U
2-Butanone	700,000	260	760	44	35,000	0.021 U	0.67 U	NA	1 U	0.66 U	0.7 U	0.65 U	0.69 U	NA	0.65 U	0.69 U
Carbon Disulfide	43,000	16	46	- -	1,600	0.0051 U	0.22 U	NA	0.34 U	0.22 U	0.23 U	0.22 U	0.23 U	NA	0.22 U	0.23 U
CFC-11	260,000	52	150	- -	110,000	0.01 U	0.089 U	NA	0.42	0.088 U	1.1 J	0.087 U	0.092 U	NA	0.087 U	0.092 U
Chlorobenzene	14,000	2	2	0.5	920	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.014 J	0.044 U	0.046 U	NA	0.043 U	0.046 U
Cyclohexane	- -	- -	- -	- -	- -	0.01 U	1.1 U	NA	0.057 J	1.1 U	0.063 J	1 U	1.1 U	NA	1 U	0.036 J
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.01 UJ	0.22 U	NA	0.34 U	0.22 U	0.11 J	0.22 U	0.23 U	NA	0.22 U	0.23 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0051 UJ	0.089 U	NA	0.13 U	0.088 U	0.094 U	0.087 U	0.092 U	NA	0.087 U	0.092 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0051 UJ	0.089 U	NA	0.13 U	0.00038 U	0.094 U	0.087 U	0.092 U	NA	0.087 U	0.092 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
Dichloromethane	5,800	0.1	0.1	30	700	0.0051 U	0.22 U	NA	0.34 U	0.22 U	0.16 J	0.22 U	0.23 U	NA	0.22 U	0.23 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0051 U	0.044 U	NA	0.037 J	0.00042 U	0.21 J	0.044 U	0.046 U	NA	0.043 U	0.015 J
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0051 U	0.22 U	NA	0.088 J	0.22 U	0.07 J	0.22 U	0.23 U	NA	0.22 U	0.054 J
Methyl acetate	- -	- -	- -	- -	- -	0.01 UJ	0.065 J	NA	1.2 J	0.068 J	0.48 J	0.066 J	0.069 J	NA	0.058 J	1.1 U
Methylcyclohexane	- -	- -	- -	- -	- -	0.01 U	1.1 U	NA	0.11 J	0.031 J	0.21 J	0.035 J	1.1 U	NA	0.034 J	0.08 J
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.021 UJ	2.2 U	NA	0.12 J	2.2 U	0.045 J	2.2 U	2.3 U	NA	2.2 U	2.3 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.0051 U	0.044 U	NA	0.067 U	0.00044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0051 U	0.044 U	NA	0.016 J	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
Toluene	160,000	16	16	5.4	3,300	0.00081 J	0.089 U	NA	0.054 J	0.088 U	0.28 J	0.087 U	0.092 U	NA	0.087 U	0.012 J
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0051 UJ	0.22 U	NA	0.34 U	0.22 U	0.23 U	0.22 U	0.23 U	NA	0.22 U	0.23 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
Trichloroethene	660	0.1	0.1	4	14	0.0051 U	0.044 U	NA	0.067 U	0.044 U	0.047 U	0.044 U	0.046 U	NA	0.043 U	0.046 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0051 U	0.22 U	NA	0.34 U	0.22 U	0.23 U	0.22 U	0.23 U	NA	0.22 U	0.23 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.01 U	0.13 U	NA	0.28	0.13 U	1.4 J	0.13 U	0.14 U	NA	0.13 U	0.035 J
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	- -	- -	- -	- -	0.3 J	0.37 U	0.5 U	NA	0.36 U	0.13 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	1.5 U	0.37 U	0.057 J	NA	0.36 U	0.21 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	0.16 J	0.042 J	0.08 J	NA	0.36 U	2.3	0.36 U	NA	0.38 U	0.36 U	0.38 U
2-Methylphenol	- -	- -	- -	- -	- -	1.5 U	0.37 U	0.5 U	NA	0.36 U	0.25 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
4-Methylphenol	- -	- -	- -	- -	- -	1.5 U	0.37 U	0.5 U	NA	0.36 U	0.26 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
Acenaphthene	130,000	300	880	8.7	97,000	1.5 U	0.37 U	0.5 U	NA	0.016 J	2 U	0.36 U	NA	0.38 U	0.028 J	0.38 U
Acenaphthylene	5,200	5.9	17	- -	2,700	1.5 U	0.37 U	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Anthracene	730,000	41	41	- -	1,600,000	1.5 U	0.071 J	0.04 J	NA	0.044 J	0.44 J	0.022 J	NA	0.033 J	0.081 J	0.021 J
Benzaldehyde	- -	- -	- -	- -	- -	1.5 U	0.024 J	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Benzo(a)anthracene	80	- -	- -	- -	- -	1.5 U	0.21 J	0.085 J	NA	0.15 J	0.67 J	0.086 J	NA	0.11 J	0.35 J	0.078 J
Benzo(a)pyrene	8	- -	- -	- -	- -	1.5 U	0.2 J	0.074 J	NA	0.14 J	0.52 J	0.092 J	NA	0.096 J	0.32 J	0.048 J
Benzo(b)fluoranthene	80	- -	- -	- -	- -	1.5 U	0.26 J	0.098 J	NA	0.17 J	0.72 J	0.12 J	NA	0.13 J	0.43	0.064 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	0.14 J	0.13 J	0.048 J	NA	0.087 J	0.34 J	0.065 J	NA	0.067 J	0.2 J	0.034 J
Benzo(k)fluoranthene	800	- -	- -	- -	- -	1.5 U	0.091 J	0.044 J	NA	0.068 J	0.2 J	0.042 J	NA	0.058 J	0.14 J	0.031 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	1.5 U	0.048 J	0.27 J	NA	0.024 J	5.9	0.03 J	NA	0.024 J	0.025 J	0.38 U
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	1.5 U	0.37 U	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Carbazole	2,400	9.4	39	1.1	- -	1.5 U	0.037 J	0.022 J	NA	0.019 J	0.26 J	0.36 U	NA	0.023 J	0.035 J	0.38 U
Chrysene	8,000	- -	- -	- -	- -	1.5 U	0.21 J	0.1 J	NA	0.14 J	0.73 J	0.096 J	NA	0.12 J	0.31 J	0.093 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	1.5 U	0.037 J	0.5 U	NA	0.018 J	0.089 J	0.017 J	NA	0.021 J	0.051 J	0.38 U
Dibenzofuran	- -	- -	- -	1.7	160	1.5 U	0.37 U	0.5 U	NA	0.36 U	0.23 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	1.5 U	0.036 J	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	1.5 U	0.029 J	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	1.5 U	0.37 U	0.5 U	NA	0.36 U	2 U	0.36 U	NA	0.38 U	0.36 U	0.38 U
Fluoranthene	130,000	730	730	5.5	890,000	1.5 U	0.46	0.21 J	NA	0.28 J	1.5 J	0.18 J	NA	0.22 J	0.62	0.11 J
Fluorene	87,000	390	890	5.3	150,000	1.5 U	0.024 J	0.027 J	NA	0.36 U	0.23 J	0.36 U	NA	0.016 J	0.025 J	0.38 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	1.5 U	0.12 J	0.043 J	NA	0.078 J	0.27 J	0.056 J	NA	0.056 J	0.18 J	0.03 J
Phenanthrene	5,200	56	160	2.1	190	0.16 J	0.27 J	0.15 J	NA	0.15 J	1.7 J	0.087 J	NA	0.11 J	0.31 J	0.093 J
Phenol	230,000	88	260	9	- -	1.5 U	0.37 U	0.5 U	NA	0.36 U	0.79 J	0.36 U	NA	0.38 U	0.36 U	0.38 U
Pyrene	84,000	480	480	- -	780,000	0.14 J	0.37	0.2 J	NA	0.26 J	1.2 J	0.16 J	NA	0.19 J	0.55	0.12 J
Naphthalene	52,000	35	100	0.73	350	1.5 U	0.025 J	0.061 J	NA	0.36 U	1.3 J	0.36 U	NA	0.38 U	0.36 U	0.38 U

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-27 0 - 2 04/18/05 BW9-27-S(0-2)041805	BW9-27 8 - 10 04/18/05 BW9-27-S(8-10)041805	BW9-27 8 - 10 04/18/05 BW9-27-S(8-10)041805DLR2	BW9-28 0 - 2 04/18/05 BW9-28-S(0-2)041805	BW9-28 8 - 10 04/18/05 BW9-28-S(8-10)041805	BW9-29 0 - 2 04/19/05 BW9-29-S(0-2)041905	BW9-29 8 - 10 04/19/05 BW9-29-S(8-10)041905	BW9-30 0 - 2 04/18/05 BW9-30-S(0-2)041805	BW9-30 8 - 10 04/18/05 BW9-30-S(8-10)041805	BW9-31 0 - 2 04/18/05 BW9-31-S(0-2)041805	BW9-31 8 - 10 04/18/05 BW9-31-S(8-10)041805
Detected Volatile Organics																
Acetone	73,000	15	42	34	160,000	0.66 U	0.69 U	NA	0.67 U	0.69 U	0.66 U	0.7 U	0.69 U	0.69 U	0.72 U	0.7 U
Benzene	840	0.1	0.1	4	45	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
2-Butanone	700,000	260	760	44	35,000	0.66 U	0.69 U	NA	0.67 U	0.056 J	0.66 U	0.7 U	0.69 U	0.69 U	0.72 U	0.7 U
Carbon Disulfide	43,000	16	46	- -	1,600	0.22 U	0.23 U	NA	0.22 U	0.23 U	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
CFC-11	260,000	52	150	- -	110,000	0.088 U	0.092 U	NA	0.089 U	0.091 U	0.088 U	0.094 U	0.092 U	0.092 U	0.096 U	0.094 U
Chlorobenzene	14,000	2	2	0.5	920	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
Cyclohexane	- -	- -	- -	- -	- -	1.1 U	0.028 J	NA	0.027 J	0.04 J	1.1 U	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.22 U	0.23 U	NA	0.22 U	0.23 U	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.088 U	0.092 U	NA	0.089 U	0.091 U	0.088 U	0.094 U	0.092 U	0.092 U	0.096 U	0.094 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.088 U	0.092 U	NA	0.089 U	0.091 U	0.088 U	0.094 U	0.092 U	0.092 U	0.096 U	0.094 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.019 J	0.046 U	0.046 U	0.048 U	0.047 U
Dichloromethane	5,800	0.1	0.1	30	700	0.22 U	0.23 U	NA	0.22 U	0.23 U	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.044 U	0.046 U	NA	0.045 U	0.0091 J	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
Isopropylbenzene	80,000	91	260	3.2	2,000	0.22 U	0.23 U	NA	0.22 U	0.057 J	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
Methyl acetate	- -	- -	- -	- -	- -	1.1 U	1.1 U	NA	0.087 J	0.067 J	1.1 U	1.1 U	0.16 J	1.1 U	1.2 U	1.1 U
Methylcyclohexane	- -	- -	- -	- -	- -	1.1 U	0.037 J	NA	1.1 U	0.094 J	0.029 J	1.1 U	1.1 U	1.1 U	1.2 U	1.1 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	2.2 U	2.3 U	NA	2.2 U	2.3 U	2.2 U	2.3 U	2.3 U	2.3 U	2.4 U	2.3 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
Toluene	160,000	16	16	5.4	3,300	0.088 U	0.017 J	NA	0.089 U	0.026 J	0.088 U	0.094 U	0.092 U	0.092 U	0.096 U	0.094 U
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.22 U	0.23 U	NA	0.22 U	0.23 U	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.047 U	0.046 U	0.046 U	0.048 U	0.047 U
Trichloroethene	660	0.1	0.1	4	14	0.044 U	0.046 U	NA	0.045 U	0.046 U	0.044 U	0.053	0.046 U	0.046 U	0.048 U	0.047 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.22 U	0.23 U	NA	0.22 U	0.23 U	0.22 U	0.23 U	0.23 U	0.23 U	0.24 U	0.23 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.13 U	0.035 J	NA	0.13 U	0.075 J	0.13 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	- -	- -	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	0.36 U	0.019 J	NA	0.084 J	0.07 J	0.36 U	0.39 U	0.38 U	0.38 U	0.029 J	0.39 U
2-Methylphenol	- -	- -	- -	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
4-Methylphenol	- -	- -	- -	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Acenaphthene	130,000	300	880	8.7	97,000	0.36 U	0.22 J	NA	0.021 J	0.021 J	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Acenaphthylene	5,200	5.9	17	- -	2,700	0.36 U	0.38 U	NA	0.37 U	0.057 J	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Anthracene	730,000	41	41	- -	1,600,000	0.36 U	0.54	NA	0.021 J	0.14 J	0.044 J	0.028 J	0.38 U	0.38 U	0.4 U	0.39 U
Benzaldehyde	- -	- -	- -	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Benzo(a)anthracene	80	- -	- -	- -	- -	0.049 J	1.5	NA	0.072 J	0.46 J	0.16 J	0.066 J	0.38 U	0.38 U	0.4 U	0.39 U
Benzo(a)pyrene	8	- -	- -	- -	- -	0.05 J	1.6	NA	0.069 J	0.32 J	0.15 J	0.067 J	0.38 U	0.38 U	0.4 U	0.39 U
Benzo(b)fluoranthene	80	- -	- -	- -	- -	0.064 J	NA	1.9	0.091 J	0.51 J	0.21 J	0.071 J	0.38 U	0.38 U	0.4 U	0.39 U
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	0.04 J	0.99	NA	0.054 J	0.2 J	0.094 J	0.042 J	0.38 U	0.38 U	0.4 U	0.39 U
Benzo(k)fluoranthene	800	- -	- -	- -	- -	0.02 J	0.65	NA	0.038 J	0.17 J	0.067 J	0.045 J	0.38 U	0.38 U	0.4 U	0.39 U
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	0.019 J	0.066 J	NA	0.049 J	0.027 J	0.037 J	0.028 J	0.38 U	0.38 U	0.4 U	0.39 U
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Carbazole	2,400	9.4	39	1.1	- -	0.36 U	0.23 J	NA	0.37 U	0.032 J	0.023 J	0.02 J	0.38 U	0.38 U	0.4 U	0.39 U
Chrysene	8,000	- -	- -	- -	- -	0.059 J	1.7	NA	0.089 J	0.48 J	0.18 J	0.07 J	0.38 U	0.38 U	0.4 U	0.39 U
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	0.36 U	0.032 J	NA	0.37 U	0.057 J	0.026 J	0.019 J	0.38 U	0.38 U	0.4 U	0.39 U
Dibenzofuran	- -	- -	- -	1.7	160	0.36 U	0.083 J	NA	0.017 J	0.034 J	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.05 J	0.38 U	0.38 U	0.4 U	0.39 U
Fluoranthene	130,000	730	730	5.5	890,000	0.099 J	NA	3.4	0.13 J	0.87 J	0.35 J	0.12 J	0.38 U	0.38 U	0.4 U	0.39 U
Fluorene	87,000	390	890	5.3	150,000	0.36 U	0.18 J	NA	0.015 J	0.028 J	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	0.032 J	0.84	NA	0.041 J	0.17 J	0.086 J	0.041 J	0.38 U	0.38 U	0.4 U	0.39 U
Phenanthrene	5,200	56	160	2.1	190	0.052 J	NA	2	0.089 J	0.35 J	0.15 J	0.064 J	0.38 U	0.38 U	0.4 U	0.39 U
Phenol	230,000	88	260	9	- -	0.36 U	0.38 U	NA	0.37 U	0.38 UJ	0.36 U	0.39 U	0.38 U	0.38 U	0.4 U	0.39 U
Pyrene	84,000	480	480	- -	780,000	0.089 J	NA	2.9	0.12 J	0.69 J	0.3 J	0.1 J	0.38 U	0.38 U	0.4 U	0.39 U
Naphthalene	52,000	35	100	0.73	350	0.36 U	0.039 J	NA	0.17 J	0.077 J	0.36 U	0.39 U	0.38 U	0.38 U	0.061 J	0.39 U

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-32 0 - 2 04/19/05 BW9-32-S(0-2)041905	BW9-32 8 - 10 04/19/05 BW9-32-S(8-10)041905	BW9-32 8 - 10 04/19/05 BW9-32-S(8-10)041905DL	BW9-33 0 - 2 04/18/05 BW9-33-S(0-2)041805	BW9-33 8 - 10 04/18/05 BW9-33-S(8-10)041805DL	BW9-34 0 - 2 04/18/05 BW9-34-S(0-2)041805	BW9-34 8 - 10 04/18/05 BW9-34-S(8-10)041805	BW9-35 0 - 2 04/18/05 BW9-35-S(0-2)041805	BW9-35 8 - 10 04/18/05 BW9-35-S(8-10)041805	BW9-36 0 - 2 04/18/05 BW9-36-S(0-2)041805DL	BW9-36 8 - 9 04/18/05 BW9-36-S(8-9)041805
Detected Volatile Organics																
Acetone	73,000	15	42	34	160,000	0.65 U	0.69 U	NA	0.7 U	0.63 U	0.67 U	0.68 U	0.66 U	0.69 U	0.61 U	0.67 U
Benzene	840	0.1	0.1	4	45	0.043 U	0.024 J	NA	0.046 U	0.013 J	0.044 U	0.01 J	0.044 U	0.044 J	0.015 J	0.0076 J
2-Butanone	700,000	260	760	44	35,000	0.65 U	0.69 U	NA	0.7 U	0.63 U	0.67 U	0.68 U	0.66 U	0.057 J	0.61 U	0.67 U
Carbon Disulfide	43,000	16	46	- -	1,600	0.22 U	0.23 U	NA	0.23 U	0.21 U	0.22 U	0.23 U	0.22 U	0.23 U	0.2 U	0.22 U
CFC-11	260,000	52	150	- -	110,000	0.087 U	0.29	NA	0.093 U	0.084 U	0.089 U	0.081 J	0.088 U	0.052 J	0.081 U	0.089 U
Chlorobenzene	14,000	2	2	0.5	920	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
Cyclohexane	- -	- -	- -	- -	- -	1 U	0.044 J	NA	0.032 J	0.046 J	1.1 U	0.036 J	1.1 U	0.063 J	0.037 J	1.1 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.22 U	0.23 U	NA	0.23 U	0.21 U	0.22 U	0.23 U	0.22 U	0.23 U	0.2 U	0.22 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.087 U	0.092 U	NA	0.093 U	0.084 U	0.089 U	0.09 U	0.088 U	0.092 U	0.081 U	0.089 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.087 U	0.092 U	NA	0.093 U	0.084 U	0.089 U	0.09 U	0.088 U	0.092 U	0.081 U	0.089 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
Dichloromethane	5,800	0.1	0.1	30	700	0.22 U	0.23 U	NA	0.23 U	0.21 U	0.22 U	0.23 U	0.22 U	0.23 U	0.2 U	0.22 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.043 U	0.024 J	NA	0.046 U	0.016 J	0.044 U	0.0093 J	0.044 U	0.036 J	0.012 J	0.0081 J
Isopropylbenzene	80,000	91	260	3.2	2,000	0.22 U	0.055 J	NA	0.23 U	0.053 J	0.22 U	0.23 U	0.22 U	0.06 J	0.048 J	0.22 U
Methyl acetate	- -	- -	- -	- -	- -	0.11 J	0.071 J	NA	1.1 U	1 U	1.1 U	1.1 U	0.079 J	0.34 J	0.095 J	0.11 J
Methylcyclohexane	- -	- -	- -	- -	- -	1 U	1.1 U	NA	0.041 J	0.1 J	1.1 U	0.063 J	1.1 U	0.11 J	0.061 J	0.038 J
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	2.2 U	2.3 U	NA	2.3 U	2.1 U	2.2 U	0.014 J	2.2 U	0.017 J	2 U	2.2 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.043 U	0.073	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.014 J
Toluene	160,000	16	16	5.4	3,300	0.087 U	0.042 J	NA	0.013 J	0.045 J	0.089 U	0.033 J	0.088 U	0.088 J	0.061 J	0.019 J
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.22 U	0.23 U	NA	0.23 U	0.21 U	0.22 U	0.23 U	0.22 U	0.23 U	0.2 U	0.22 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.043 U	0.046 U	NA	0.046 U	0.042 U	0.044 U	0.045 U	0.044 U	0.046 U	0.04 U	0.044 U
Trichloroethene	660	0.1	0.1	4	14	0.043 U	0.046 U	NA	0.19	0.035 J	0.044 U	0.043 J	0.044 U	0.046 U	0.04 U	0.044 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.22 U	0.23 U	NA	0.23 U	0.21 U	0.22 U	0.23 U	0.22 U	0.23 U	0.2 U	0.22 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.13 U	0.074 J	NA	0.033 J	0.1 J	0.13 U	0.061 J	0.13 U	0.19	0.12	0.053 J
Detected Semivolatile Organics																
1,1'-Biphenyl	- -	- -	- -	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	26,000	57	170	4.2	1,800	0.015 J	NA	0.84 J	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	- -	- -	- -	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	- -	- -	- -	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	130,000	300	880	8.7	97,000	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	5,200	5.9	17	- -	2,700	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	730,000	41	41	- -	1,600,000	0.042 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzaldehyde	- -	- -	- -	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	80	- -	- -	- -	- -	0.14 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	8	- -	- -	- -	- -	0.13 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	80	- -	- -	- -	- -	0.17 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	0.094 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	800	- -	- -	- -	- -	0.065 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	0.032 J	NA	1 J	NA	NA	NA	NA	NA	NA	NA	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	2,400	9.4	39	1.1	- -	0.021 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	8,000	- -	- -	- -	- -	0.13 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	0.023 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	- -	- -	1.7	160	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Butylphthalate	87,000	960	2,700	11	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	130,000	730	730	5.5	890,000	0.27 J	NA	1.4 J	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	87,000	390	890	5.3	150,000	0.018 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	0.081 J	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	5,200	56	160	2.1	190	0.16 J	NA	1.4 J	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	230,000	88	260	9	- -	0.36 U	NA	1.1 J	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	84,000	480	480	- -	780,000	0.24 J	NA	1.1 J	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	52,000	35	100	0.73	350	0.36 U	NA	19 U	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	BW9-37 0 - 2 04/18/05 BW9-37-S(0-2)041805	BW9-37 8 - 10 04/18/05 BW9-37-S(8-10)041805DL	MWW9-01 1 - 2 07/28/03 MWW901S(0-2)	MWW9-01 1 - 2 07/28/03 MWW901S(0-2)DL	MWW9-01 8 - 10 07/28/03 MWW901S(8-10)DL	MWW9-01 8 - 10 07/28/03 MWW901S(8-10)R2	MWW9-01 24.5 - 26.5 07/28/03 MWW901S(24.5-26.5)	MWW9-01 24.5 - 26.5 07/28/03 MWW901S(24.5-26.5)DL	MWW9-02 0.3 - 2 07/28/03 MWW902S(0-2)	MWW9-02 0.3 - 2 07/28/03 MWW902S(0-2)DL	MWW9-02 8 - 10 07/28/03 MWW902S(8-10)	MWW9-02 8 - 10 07/28/03 MWW902S(8-10)DL	MWW9-02 23 - 25 07/28/03 MWW902S(23-25)
Detected Volatile Organics																		
Acetone	73,000	15	42	34	160,000	0.65 U	0.13 J	NA	0.019 U	0.023 U	NA	NA	0.023 U	NA	0.019 U	NA	0.021 U	NA
Benzene	840	0.1	0.1	4	45	0.0095 J	0.037 J	NA	0.0048 U	0.0057 U	NA	NA	0.00053 J	NA	0.0049 U	NA	0.0053 U	NA
2-Butanone	700,000	260	760	44	35,000	0.65 U	0.072 J	NA	0.019 U	0.023 U	NA	NA	0.023 U	NA	0.019 U	NA	0.021 U	NA
Carbon Disulfide	43,000	16	46	- -	1,600	0.22 U	0.23 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
CFC-11	260,000	52	150	- -	110,000	0.087 U	0.091 U	NA	0.0096 U	0.011 U	NA	NA	0.011 U	NA	0.0097 U	NA	0.00084 J	NA
Chlorobenzene	14,000	2	2	0.5	920	0.043 U	0.046 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Cyclohexane	- -	- -	- -	- -	- -	0.042 J	0.051 J	NA	0.0096 U	0.011 U	NA	NA	0.011 U	NA	0.0097 U	NA	0.00083 J	NA
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.22 U	0.23 U	NA	0.0096 U	0.011 UJ	NA	NA	0.011 U	NA	0.0097 U	NA	0.011 UJ	NA
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.087 U	0.091 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 UJ	NA
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.087 U	0.091 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 UJ	NA
1,1-Dichloroethane	87,000	18	50	15	2,500	0.043 U	0.046 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.043 U	0.046 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.043 U	0.046 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Dichloromethane	5,800	0.1	0.1	30	700	0.22 U	0.23 U	NA	0.0017 J	0.0022 J	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0021 J	NA
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.015 J	0.062	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Isopropylbenzene	80,000	91	260	3.2	2,000	0.052 J	0.064 J	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Methyl acetate	- -	- -	- -	- -	- -	0.064 J	0.16 J	NA	0.0096 U	0.011 U	NA	NA	0.011 U	NA	0.0097 U	NA	0.011 U	NA
Methylcyclohexane	- -	- -	- -	- -	- -	0.086 J	0.13 J	NA	0.0096 U	0.011 U	NA	NA	0.0018 J	NA	0.0097 U	NA	0.00055 J	NA
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	2.2 U	0.032 J	NA	0.019 U	0.023 U	NA	NA	0.023 U	NA	0.019 U	NA	0.021 U	NA
Styrene	1,900	2.7	2.7	2.1	3,300	0.043 U	0.046 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Tetrachloroethene	930	0.1	0.1	1.2	210	0.043 U	0.046 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Toluene	160,000	16	16	5.4	3,300	0.031 J	0.082 J	NA	0.0048 U	0.00045 J	NA	NA	0.0017 J	NA	0.0049 U	NA	0.00079 J	NA
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.22 U	0.23 U	NA	0.0048 U	0.0057 UJ	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 UJ	NA
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.043 U	0.046 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Trichloroethene	660	0.1	0.1	4	14	0.043 U	0.046 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.22 U	0.23 U	NA	0.0048 U	0.0057 U	NA	NA	0.0057 U	NA	0.0049 U	NA	0.0053 U	NA
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.08 J	0.22	NA	0.0096 U	0.011 UJ	NA	NA	0.011 U	NA	0.0097 U	NA	0.011 U	NA
Detected Semivolatile Organics																		
1,1'-Biphenyl	- -	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.071 J	NA	0.36 U	NA	0.36 U	NA	0.075 J
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	NA	NA	0.37 U	NA	NA	0.036 J	0.1 J	NA	0.027 J	NA	0.072 J	NA	0.097 J
2-Methylphenol	- -	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
4-Methylphenol	- -	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Acenaphthene	130,000	300	880	8.7	97,000	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Acenaphthylene	5,200	5.9	17	- -	2,700	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Anthracene	730,000	41	41	- -	1,600,000	NA	NA	0.074 J	NA	NA	0.35 U	0.065 J	NA	0.36 U	NA	0.021 J	NA	0.071 J
Benzaldehyde	- -	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Benzo(a)anthracene	80	- -	- -	- -	- -	NA	NA	0.05 J	NA	NA	0.047 J	0.018 J	NA	0.032 J	NA	0.21 J	NA	0.13 J
Benzo(a)pyrene	8	- -	- -	- -	- -	NA	NA	0.084 J	NA	NA	0.027 J	0.041 J	NA	0.033 J	NA	0.35 J	NA	0.23 J
Benzo(b)fluoranthene	80	- -	- -	- -	- -	NA	NA	0.1 J	NA	NA	0.04 J	0.049 J	NA	0.055 J	NA	0.48	NA	0.31 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	NA	NA	0.035 J	NA	NA	0.024 J	0.35 U	NA	0.029 J	NA	0.23 J	NA	0.15 J
Benzo(k)fluoranthene	800	- -	- -	- -	- -	NA	NA	0.066 J	NA	NA	0.02 J	0.048 J	NA	0.36 U	NA	0.19 J	NA	0.16 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	NA	NA	0.036 J	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Carbazole	2,400	9.4	39	1.1	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.054 J
Chrysene	8,000	- -	- -	- -	- -	NA	NA	0.066 J	NA	NA	0.035 J	0.031 J	NA	0.046 J	NA	0.27 J	NA	0.19 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.09 J	NA	0.074 J
Dibenzofuran	- -	- -	- -	1.7	160	NA	NA	0.37 U	NA	NA	0.35 U	0.02 J	NA	0.36 U	NA	0.03 J	NA	0.02 J
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Fluoranthene	130,000	730	730	5.5	890,000	NA	NA	0.16 J	NA	NA	0.028 J	0.093 J	NA	0.061 J	NA	0.19 J	NA	0.2 J
Fluorene	87,000	390	890	5.3	150,000	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	NA	NA	0.03 J	NA	NA	0.35 U	0.35 U	NA	0.024 J	NA	0.23 J	NA	0.12 J
Phenanthrene	5,200	56	160	2.1	190	NA	NA	0.11 J	NA	NA	0.035 J	0.12 J	NA	0.053 J	NA	0.14 J	NA	0.15 J
Phenol	230,000	88	260	9	- -	NA	NA	0.37 U	NA	NA	0.35 U	0.35 U	NA	0.36 U	NA	0.36 U	NA	0.35 U
Pyrene	84,000	480	480	- -	780,000	NA	NA	0.095 J	NA	NA	0.029 J	0.03 J	NA	0.057 J	NA	0.19 J	NA	0.15 J
Naphthalene	52,000	35	100	0.73	350	NA	NA	0.37 U	NA	NA	0.027 J	0.045 J	NA	0.36 U	NA	0.055 J	NA	0.036 J

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MWW9-02 23 - 25 07/28/03 MWW902S(23-25)DL	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)	SW9-01 0 - 2 06/27/01 SW9-01-S(0-2)DL	SW9-02 0 - 2 06/27/01 SW9-02-S(0-2)062701	SW9-02 0 - 2 06/27/01 SW9-02-S(02)062701DL	SW9-03 0 - 2 06/27/01 SW9-03-S(0-2)062701	SW9-03 0 - 2 06/27/01 SW9-03-S(02)062701DL	SW9-04 0 - 2 06/27/01 SW9-04-S(0-2)062701	SW9-04 0 - 2 06/27/01 SW9-04-S(02)062701DL	SW9-05 0 - 2 06/27/01 SW9-05-S(0-2)062701	SW9-05 0 - 2 06/27/01 SW9-05-S(02)062701DL	SW9-06 0 - 2 06/27/01 SW9-06-S(02)062701DL
Detected Volatile Organics																	
Acetone	73,000	15	42	34	160,000	0.02 U	NA	0.31 J	NA	0.021 UJ	NA	0.019 UJ [0.019 UJ]	NA	0.02 UJ	NA	0.018 UJ	0.029 UJ
Benzene	840	0.1	0.1	4	45	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
2-Butanone	700,000	260	760	44	35,000	0.02 U	NA	1.5 U	NA	0.021 U	NA	0.019 UJ [0.019 UJ]	NA	0.02 UJ	NA	0.018 UJ	0.029 UJ
Carbon Disulfide	43,000	16	46	- -	1,600	0.00031 J	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
CFC-11	260,000	52	150	- -	110,000	0.01 U	NA	0.76 U	NA	0.011 U	NA	0.0097 U [0.0093 U]	NA	0.01 U	NA	0.0091 U	0.015 U
Chlorobenzene	14,000	2	2	0.5	920	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Cyclohexane	- -	- -	- -	- -	- -	0.01 U	NA	0.029 J	NA	0.011 U	NA	0.0097 U [0.0093 U]	NA	0.01 U	NA	0.0091 U	0.015 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.01 U	NA	0.76 U	NA	0.011 UJ	NA	0.0097 UJ [0.0093 UJ]	NA	0.01 UJ	NA	0.0091 UJ	0.015 UJ
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Dichloromethane	5,800	0.1	0.1	30	700	0.0018 J	NA	0.13 J	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0059 [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Methyl acetate	- -	- -	- -	- -	- -	0.01 U	NA	2.6	NA	0.011 U	NA	0.0097 U [0.0093 U]	NA	0.01 U	NA	0.0091 U	0.015 U
Methylcyclohexane	- -	- -	- -	- -	- -	0.01 U	NA	0.056 J	NA	0.011 U	NA	0.0097 U [0.0093 U]	NA	0.01 U	NA	0.0091 U	0.015 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.02 U	NA	1.5 U	NA	0.021 U	NA	0.019 U [0.019 U]	NA	0.02 U	NA	0.018 U	0.029 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Toluene	160,000	16	16	5.4	3,300	0.00056 J	NA	0.037 J	NA	0.0054 U	NA	0.00081 J [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Trichloroethene	660	0.1	0.1	4	14	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0078 [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0051 U	NA	0.38 U	NA	0.0054 U	NA	0.0048 U [0.0047 U]	NA	0.005 U	NA	0.0046 U	0.0073 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.01 U	NA	0.063 J	NA	0.011 U	NA	0.0097 U [0.0093 U]	NA	0.01 U	NA	0.0091 U	0.015 U
Detected Semivolatile Organics																	
1,1'-Biphenyl	- -	- -	- -	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
2-Methylnaphthalene	26,000	57	170	4.2	1,800	NA	0.17 J	NA	0.37	NA	0.075 J [0.36 U]	NA	0.087 J	NA	0.36 U	NA	0.77 U
2-Methylphenol	- -	- -	- -	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
4-Methylphenol	- -	- -	- -	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Acenaphthene	130,000	300	880	8.7	97,000	NA	0.09 J	NA	0.3 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Acenaphthylene	5,200	5.9	17	- -	2,700	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Anthracene	730,000	41	41	- -	1,600,000	NA	0.18 J	NA	0.41	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Benzaldehyde	- -	- -	- -	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Benzo(a)anthracene	80	- -	- -	- -	- -	NA	0.4	NA	0.69	NA	0.1 J [0.081 J]	NA	0.06 J	NA	0.087 J	NA	0.27 J
Benzo(a)pyrene	8	- -	- -	- -	- -	NA	0.36	NA	0.62	NA	0.11 J [0.1 J]	NA	0.08 J	NA	0.14 J	NA	0.48 J
Benzo(b)fluoranthene	80	- -	- -	- -	- -	NA	0.59	NA	0.89	NA	0.15 J [0.12 J]	NA	0.12 J	NA	0.17 J	NA	0.41 J
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	NA	0.24 J	NA	0.46	NA	0.071 J [0.061 J]	NA	0.063 J	NA	0.094 J	NA	0.58 J
Benzo(k)fluoranthene	800	- -	- -	- -	- -	NA	0.2 J	NA	0.25 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.067 J	NA	0.21 J
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	NA	0.13 J	NA	0.49	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	1.8
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	NA	0.14 J	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	1.7
Carbazole	2,400	9.4	39	1.1	- -	NA	0.1 J	NA	0.29 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Chrysene	8,000	- -	- -	- -	- -	NA	0.45	NA	0.8	NA	0.12 J [0.093 J]	NA	0.071 J	NA	0.11 J	NA	0.42 J
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	NA	0.064 J	NA	0.16 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Dibenzofuran	- -	- -	- -	1.7	160	NA	0.092 J	NA	0.26 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Di-n-Butylphthalate	87,000	960	2,700	11	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Fluoranthene	130,000	730	730	5.5	890,000	NA	1	NA	1.9	NA	0.16 J [0.19 J]	NA	0.094 J	NA	0.22 J	NA	0.5 J
Fluorene	87,000	390	890	5.3	150,000	NA	0.085 J	NA	0.25 J	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	NA	0.22 J	NA	0.39	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.081 J	NA	0.26 J
Phenanthrene	5,200	56	160	2.1	190	NA	1	NA	2.3	NA	0.11 J [0.12 J]	NA	0.082 J	NA	0.11 J	NA	0.28 J
Phenol	230,000	88	260	9	- -	NA	0.36 U	NA	0.34 U	NA	0.36 U [0.36 U]	NA	0.35 U	NA	0.36 U	NA	0.77 U
Pyrene	84,000	480	480	- -	780,000	NA	0.76	NA	1.2	NA	0.13 J [0.12 J]	NA	0.074 J	NA	0.17 J	NA	0.46 J
Naphthalene	52,000	35	100	0.73	350	NA	0.13 J	NA	0.33 J	NA	0.36 U [0.36 U]	NA	0.054 J	NA	0.36 U	NA	0.77 U

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	SW9-07 0 - 2 06/27/01 SW9-07-S(02)062701DL	SW9-08 0 - 2 06/27/01 SW9-08-S(0-2)	SW9-08 0 - 2 06/27/01 SW9-08-S(0-2)DL	SW9-09 0 - 2 06/27/01 SW9-09-S(02)062701DL	SW9-10 0 - 2 06/27/01 SW9-10-S(0-2)062701	SW9-10 0 - 2 06/27/01 SW9-10-S(02)062701DL
Detected Volatile Organics											
Acetone	73,000	15	42	34	160,000	0.029 UJ	NA	0.017 UJ	0.019 UJ	NA	0.02 U
Benzene	840	0.1	0.1	4	45	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
2-Butanone	700,000	260	760	44	35,000	0.029 UJ	NA	0.017 UJ	0.019 UJ	NA	0.02 UJ
Carbon Disulfide	43,000	16	46	- -	1,600	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
CFC-11	260,000	52	150	- -	110,000	0.014 U	NA	0.0085 U	0.0093 U	NA	0.0099 UJ
Chlorobenzene	14,000	2	2	0.5	920	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Cyclohexane	- -	- -	- -	- -	- -	0.014 U	NA	0.0085 U	0.0093 U	NA	0.0099 U
1,2-Dibromo-3-chloropropane	20	0.01	0.01	- -	0.9	0.014 UJ	NA	0.0085 UJ	0.0093 UJ	NA	0.0099 U
1,2-Dichlorobenzene	63,000	14	14	0.28	46,000	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
1,4-Dichlorobenzene	1,900	1.7	1.7	0.36	260	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
1,1-Dichloroethane	87,000	18	50	15	2,500	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
1,1-Dichloroethene	660	0.14	0.14	2.6	3.7	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
cis-1,2-Dichloroethene	8,000	1.4	1.4	12	210	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Dichloromethane	5,800	0.1	0.1	30	700	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Ethylbenzene	71,000	1.5	1.5	0.36	2,400	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Isopropylbenzene	80,000	91	260	3.2	2,000	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Methyl acetate	- -	- -	- -	- -	- -	0.014 U	NA	0.0085 UJ	0.0093 UJ	NA	0.0099 U
Methylcyclohexane	- -	- -	- -	- -	- -	0.014 U	NA	0.0085 U	0.0093 U	NA	0.0099 U
4-Methyl-2-pentanone	180,000	36	100	- -	53,000	0.029 U	NA	0.017 U	0.019 U	NA	0.02 U
Styrene	1,900	2.7	2.7	2.1	3,300	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Tetrachloroethene	930	0.1	0.1	1.2	210	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Toluene	160,000	16	16	5.4	3,300	0.0072 U	NA	0.0043 U	0.00058 J	NA	0.0049 U
1,2,4-Trichlorobenzene	5,800	4.2	4.2	5.9	34,000	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
1,1,1-Trichloroethane	1,000,000	4	4	1.8	4,500	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 UJ
Trichloroethene	660	0.1	0.1	4	14	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
1,1,2-trichloro-1,2,2-trifluoroethane	1,000,000	9,000	9,000	1.7	210,000	0.0072 U	NA	0.0043 U	0.0047 U	NA	0.0049 U
Total Xylenes	1,000,000	5.6	5.6	0.98	54,000	0.014 U	NA	0.0085 U	0.0093 U	NA	0.0099 U
Detected Semivolatile Organics											
1,1'-Biphenyl	- -	- -	- -	- -	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
2,4-Dimethylphenol	36,000	7.4	20	7.6	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
2-Methylnaphthalene	26,000	57	170	4.2	1,800	2.5 U	0.37 U	NA	7 U	0.28 J	NA
2-Methylphenol	- -	- -	- -	- -	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
4-Methylphenol	- -	- -	- -	- -	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Acenaphthene	130,000	300	880	8.7	97,000	0.93 J	0.37 U	NA	7 U	0.054 J	NA
Acenaphthylene	5,200	5.9	17	- -	2,700	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Anthracene	730,000	41	41	- -	1,600,000	2 J	0.37 U	NA	7 U	0.12 J	NA
Benzaldehyde	- -	- -	- -	- -	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Benzo(a)anthracene	80	- -	- -	- -	- -	5.5	0.37 U	NA	7 U	0.41	NA
Benzo(a)pyrene	8	- -	- -	- -	- -	5.9	0.37 U	NA	7 U	0.52	NA
Benzo(b)fluoranthene	80	- -	- -	- -	- -	8.2	0.068 J	NA	7 U	0.91	NA
Benzo(g,h,i)perylene	7,000	- -	- -	- -	- -	4.6	0.37 U	NA	7 U	0.42	NA
Benzo(k)fluoranthene	800	- -	- -	- -	- -	3.8	0.37 U	NA	7 U	0.3 J	NA
bis(2-Ethylhexyl)phthalate	12,000	- -	- -	- -	- -	5.2	0.37 U	NA	53	0.42	NA
Butylbenzylphthalate	120,000	2,200	5,000	120	- -	6	0.37 U	NA	28	0.12 J	NA
Carbazole	2,400	9.4	39	1.1	- -	1.2 J	0.37 U	NA	7 U	0.056 J	NA
Chrysene	8,000	- -	- -	- -	- -	6.4	0.37 U	NA	7 U	0.77	NA
Dibenzo(a,h)anthracene	8	- -	- -	- -	- -	1.2 J	0.37 U	NA	7 U	0.13 J	NA
Dibenzofuran	- -	- -	- -	1.7	160	0.49 J	0.37 U	NA	7 U	0.083 J	NA
Dimethylphthalate	1,000,000	1,500	4,200	- -	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Di-n-Butylphthalate	87,000	960	2,700	11	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Di-n-Octylphthalate	20,000	100,000	290,000	- -	- -	2.9	0.37 U	NA	7 U	0.34 U	NA
Fluoranthene	130,000	730	730	5.5	890,000	13	0.37 U	NA	7 U	0.66	NA
Fluorene	87,000	390	890	5.3	150,000	0.84 J	0.37 U	NA	7 U	0.34 U	NA
Indeno(1,2,3-cd)pyrene	80	- -	- -	- -	- -	3.9	0.37 U	NA	7 U	0.36	NA
Phenanthrene	5,200	56	160	2.1	190	9	0.37 U	NA	7 U	0.48	NA
Phenol	230,000	88	260	9	- -	2.5 U	0.37 U	NA	7 U	0.34 U	NA
Pyrene	84,000	480	480	- -	780,000	10	0.37 U	NA	7 U	0.62	NA
Naphthalene	52,000	35	100	0.73	350	0.45 J	0.37 U	NA	7 U	0.17 J	NA

See Notes on last page.

Table 4-29 W-09 VOC-SVOC Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-31 W-10 Inorganic Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Sample Depth (ft BGS): / Date Collected: / Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW10-01 0 - 2 07/30/01 BW10-01-S(0-2)-N	BW10-01 8 - 10 07/30/01 BW10-01-S(8-10)-N	BW10-01 12 - 14 07/30/01 BW10-01-S(12-14)-N	BW10-02 0 - 2 07/30/01 BW10-02-S(0-2)-N	BW10-02 8 - 10 07/30/01 BW10-02-S(8-10)-N	BW10-02 12 - 14 07/30/01 BW10-02-S(12-14)-N	BW10-03 0 - 2 07/30/01 BW10-03-S(0-2)-N	BW10-03 8 - 10 07/30/01 BW10-03-S(8-10)-N	BW10-03 12 - 14 07/30/01 BW10-03-S(12-14)-N	MWW10-02 0.6 - 2 01/28/02 BMWW10-02-S(0-2)	MWW10-02 8 - 10 01/28/02 BMWW10-02-S(8-10)
Detected Inorganics																					
Antimony	- -	- -	670	4.3	4.3	94	- -	*5,900*	- -	- -	0.738 J	0.864 J	1.09 J	1.04 J	0.527 U	0.538 U [0.545 U]	1.57 J	0.564 U	0.571 U	2.07 U	2.19 U
Arsenic	8.05	5.8	37	4.6	4.6	4.6	- -	*910*	- -	- -	2.82	3.75	8.05	4.17	1.91	1.66 [1.75]	4.47	4.11	3.87	2.84	3.11
Barium	75	75	130,000	1,300	1,300	440	- -	*150,000*	- -	- -	86.2	15.8	19.2	36	27.7	41.8 [40.3]	84.9	28.7	41	9.06	6.91
Beryllium	- -	- -	1,600	51	51	84	- -	*590*	- -	- -	0.0502 U	0.0502 U	0.0514 U	0.349	0.0495 U	0.0505 U [0.0512 U]	1.16	0.0846 J	0.155	0.103 U	0.11 U
Cadmium	- -	1.2	2,100	6	6	3	- -	*2,200*	- -	- -	0.0654 J	0.047 U	0.32 J	0.22 J	0.0462 U	0.0472 U [0.0478 U]	0.339 J	0.109 J	0.153 J	0.0918 J	0.169 J
Chromium	23.2	- -	9,200	30	30	3.3	- -	*240*	- -	- -	32.9	44.1	94.4	124	22	18 [16.4]	37.1	9.37	14.1	4.59	4.84
Cobalt	11.8	6.8	9,000	0.8	2	2	- -	*5,900*	- -	- -	2.19	3.41	5.66	2.62	2.09	1.35 [1.39]	4.65	4.6	6.93	1.95	2.2
Copper	- -	32	73,000	5,800	5,800	73	- -	*59,000*	- -	- -	21.6	48.8	112	45.2	16.3	12.9 [12.7]	45.1	11.4	16.5	5.51	8.1
Lead	33.2	21	900	700	700	2,500	- -	*44,000*	- -	- -	18.3	22.2	28.9	27.8	8.72	26.5 [41.8]	50.2	8.59	26.3	2.94	3.5
Manganese	631	440	90,000	1	1	26	- -	*1,500*	- -	- -	*1,770*	402	864	1,330	534	736 [652]	659	300	308	157	172
Mercury	- -	0.13	580	1.7	1.7	0.05	62	*8,800*	**89**	- -	0.0092 U	0.0092 U	0.0094 U	0.0199 J	0.009 U	0.018 J [0.0207 J]	0.091	0.0134 J	0.0185 J	0.0341 U	0.0361 U
Nickel	29	20	150,000	100	100	76	- -	*16,000*	- -	- -	14.6	33.9	77.5	21.1	18.2	8.53 [10.9]	23.5	12.6	19	5.66	5.13
Selenium	- -	0.41	9,600	4	4	0.4	- -	*59,000*	- -	- -	0.382 J	0.729	0.499 J	0.732	0.401 J	0.34 U [0.345 U]	0.433 J	0.357 U	0.361 U	0.517 U	0.548 U
Thallium	- -	- -	130	2.3	2.3	4.2	- -	*5,900*	- -	- -	1.78	0.546 U	0.638 J	0.527 J	0.598 J	0.794 J [0.556 U]	0.723 J	0.745 J	0.583 U	0.578 J	0.609 J
Vanadium	27.7	- -	5,500	72	990	430	- -	- -	- -	- -	8.07	8.07	11.7	18	6.45	5.6 [4.94]	11.3	14.1	18.6	5.77	7.14
Zinc	76.3	47	630,000	2,400	5,000	170	- -	- -	- -	- -	13.1	26.4	35.4	30.1	9.91	20.2 [21.3]	64.1	31.1	42.4	17.8	27

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
*	Exceeds MDEQ 2013 Nonresidential Direct Contact Cleanup Criteria
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-31 W-10 Misc. Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth(ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	Units	BW10-01 0 - 2 07/30/01 BW10-01-S(0-2)-N	BW10-01 8 - 10 07/30/01 BW10-01-S(8-10)-N	BW10-01 12 - 14 07/30/01 BW10-01-S(12-14)-N	BW10-02 0 - 2 07/30/01 BW10-02-S(0-2)-N	BW10-02 8 - 10 07/30/01 BW10-02-S(8-10)-N	BW10-02 12 - 14 07/30/01 BW10-02-S(12-14)-N	BW10-03 0 - 2 07/30/01 BW10-03-S(0-2)-N	BW10-03 8 - 10 07/30/01 BW10-03-S(8-10)-N	BW10-03 12 - 14 07/30/01 BW10-03-S(12-14)-N	MWW10-02 0.6 - 2 01/28/02 BMWW10-02-S(0-2)	MWW10-02 8 - 10 01/28/02 BMWW10-02-S(8-10)
Detected Solids																						
Total Solids	--	--	--	--	--	--	--	--	--	--	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	96.7	91.3
Total solids (residue)	--	--	--	--	--	--	--	--	--	--	%	91.7	91.6	89.5	95.5	93.0	91.1 [89.9]	88.4	86.8	85.8	NA	NA

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
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MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-31 W-10 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW10-01 0 - 2 07/30/01 BW10-01-S(0-2)-N	BW10-01 8 - 10 07/30/01 BW10-01-S(8-10)-N	BW10-01 12 - 14 07/30/01 BW10-01-S(12-14)-N	BW10-02 0 - 2 07/30/01 BW10-02-S(0-2)-N	BW10-02 8 - 10 07/30/01 BW10-02-S(8-10)-N	BW10-02 12 - 14 07/30/01 BW10-02-S(12-14)-N
Detected PCBs																
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.2 U	0.02 U	0.02 U	0.019 U	0.19 U	0.4 U [0.4 U]
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.05 U	0.14	0.0051 U	0.021 J	4.2	4.9 [7.2]
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	1.1	0.022 U	0.022 U	0.021 U	0.22 U	0.44 U [0.45 U]
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	0.081 U	0.0081 U	0.0083 U	0.05	0.08 U	0.16 U [0.16 U]
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	1.1	0.14	0.022 U	0.071 J	4.2	4.9 [7.2]

See Notes on last page.

Table 4-31 W-10 PCB Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW10-03 0 - 2 07/30/01 BW10-03-S(0-2)-N	BW10-03 8 - 10 07/30/01 BW10-03-S(8-10)-N	BW10-03 12 - 14 07/30/01 BW10-03-S(12-14)-N	MWW10-02 0.6 - 2 01/28/02 BMWW10-02-S(0-2)	MWW10-02 8 - 10 01/28/02 BMWW10-02-S(8-10)
Detected PCBs															
Aroclor-1242	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.2 U	0.021 U	0.21 U	0.034 U	0.036 U
Aroclor-1248	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	2.6	0.0053 U	0.054 U	0.034 U	0.036 U
Aroclor-1254	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.23 U	0.023 U	0.61	0.034 U	0.036 U
Aroclor-1260	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.084 U	0.0085 U	0.086 U	0.034 U	0.036 U
Total PCBs	- -	- -	16	- -	- -	- -	810	6,500	**16,000**	- -	2.6	0.023 U	0.61	0.034 U	0.036 U

See Notes on last page.

Table 4-31 W-10 PCB Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations
BOLD	Exceeds MDEQ 2013 Soil Volatilization to Indoor Air Inhalation Criteria

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
PCBs	Polychlorinated Biphenyls
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Table 4-31 W-10 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW10-01 0 - 2 07/30/01 BW10-01-S(0-2)-N	BW10-01 8 - 10 07/30/01 BW10-01-S(8-10)-N	BW10-01 12 - 14 07/30/01 BW10-01-S(12-14)-N	BW10-02 0 - 2 07/30/01 BW10-02-S(0-2)-N	BW10-02 8 - 10 07/30/01 BW10-02-S(8-10)-N	BW10-02 12 - 14 07/30/01 BW10-02-S(12-14)-N	BW10-03 0 - 2 07/30/01 BW10-03-S(0-2)-N
Detected Volatile Organics																	
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.0023 UJ	0.0023 UJ	0.0023 UJ	0.0021 UJ	0.075 UJ	0.071 UJ [0.08 UJ]	0.0019 U
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.00071 U	0.00071 U	0.0007 U	0.00065 U	0.017 U	0.016 U [0.018 U]	0.0006 U
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0029 UJ	0.0029 UJ	0.0029 UJ	0.0027 UJ	0.081 U	0.076 U [0.087 U]	0.0025 U
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.00085 U	0.00085 U	0.00084 U	0.00078 U	0.035 U	0.033 U [0.037 U]	0.00072 U
Chloroethane	- -	- -	12,000	8.6	34	22	36,000	290,000,000	**5,300**	950	0.0024 U	0.0024 U	0.0024 U	0.0022 U	0.037 U	0.035 U [0.04 UJ]	0.002 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0011 U	0.0011 U	0.0011 U	0.001 U	0.0085 U	0.058 J [0.083 J]	0.00093 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.00073 U	0.00073 U	0.00072 U	0.00067 U	0.016 U	0.015 U [0.017 U]	0.00062 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0014 UJ	0.0014 UJ	0.0014 UJ	0.0013 UJ	0.041 U	0.28 J [0.044 UJ]	0.0012 UJ
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.00064 U	0.00064 U	0.00063 U	0.00059 U	0.014 U	0.013 U [0.02 J]	0.00055 U
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.00076 U	0.00076 U	0.00075 U	0.0007 U	0.0079 U	0.18 J [0.32]	0.00065 U
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.0012 U	0.0012 U	0.0012 U	0.0011 U	0.097 J	0.074 J [0.091 J]	0.001 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.00064 U	0.00064 U	0.00063 U	0.00059 U	0.016 U	0.32 J [0.57]	0.00055 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.0021 U	0.0021 U	0.002 U	0.0019 U	0.029 U	0.027 U [0.031 U]	0.0018 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.00058 U	0.00058 U	0.00057 U	0.00053 U	0.01 U	0.054 J [0.058 J]	0.00067 J
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.001 U	0.001 U	0.00099 U	0.00092 U	0.0099 U	0.0093 U [0.011 U]	0.00085 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.00083 U	0.00083 U	0.00082 U	0.00076 U	0.017 U	0.016 U [0.018 U]	0.00071 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.0021 U	0.0021 U	0.002 U	0.0019 U	0.019 U	0.091 J [0.16 J]	0.0018 U
Detected Semivolatile Organics																	
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.52 U	0.26 U	0.054 U	0.2 U	1 U	1.3 U [1.3 U]	1.1 U
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	0.56 U	0.28 U	0.057 U	0.21 U	1.1 U	1.4 U [1.4 U]	1.2 U
Acenaphthylene	- -	- -	5,200	5.9	17	- -	2,700	1,000,000	**3,000**	- -	0.51 U	0.26 U	0.053 U	0.2 U	1 U	1.3 U [1.3 U]	1.1 U
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	0.53 U	0.27 U	0.055 U	0.21 U	1.1 U	1.3 U [1.4 U]	1.1 U
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.6 U	0.3 U	0.061 U	0.23 U	1.2 U	1.5 U [1.5 U]	1.2 U
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	0.65 U	0.33 U	0.067 U	0.25 U	1.3 U	1.6 U [1.7 U]	1.4 U
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.63 U	0.32 U	0.065 U	0.24 U	1.2 U	1.6 U [1.6 U]	1.3 U
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	0.6 U	0.3 U	0.061 U	0.23 U	1.2 U	1.5 U [1.5 U]	1.2 U
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	0.58 U	0.29 U	0.059 U	0.22 U	1.1 U	1.5 U [1.5 U]	1.2 U
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.59 U	0.29 U	0.06 U	0.23 U	1.2 U	1.5 U [1.5 U]	1.2 U
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.56 U	0.28 U	0.057 U	0.21 U	1.1 U	1.4 U [1.4 U]	1.2 U
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	0.5 U	0.25 U	0.051 U	0.19 U	0.99 U	1.3 U [1.3 U]	1 U
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	0.56 U	0.28 U	0.057 U	0.21 U	1.1 U	1.4 U [1.4 U]	1.2 U
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	0.55 U	0.27 U	0.056 U	0.21 U	1.1 U	1.4 U [1.4 U]	1.1 U
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	0.61 U	0.31 U	0.063 U	0.23 U	1.2 U	1.5 U [1.6 U]	1.3 U
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	0.52 U	0.26 U	0.054 U	0.2 U	1 U	1.3 U [1.3 U]	1.1 U
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.76 U	0.38 U	0.078 U	0.29 U	1.5 U	1.9 U [1.9 U]	1.6 U
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.57 U	0.28 U	0.058 U	0.22 U	1.1 U	2.6 J [3.6 J]	1.2 U
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	0.53 U	0.27 U	0.055 U	0.21 U	1.1 U	1.3 U [1.4 U]	1.1 U
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	0.56 U	0.28 U	0.057 U	0.21 U	1.1 U	1.4 U [1.4 U]	1.5 J
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.53 U	0.27 U	0.055 U	0.21 U	1.1 U	1.3 U [1.4 U]	1.1 U

See Notes on last page.

Table 4-31 W-10 VOC-SVOC Soil
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Sample Depth (ft BGS): Date Collected: Sample Name:	MDEQ 2013 UPDATED SSBC	MDEQ 2013 UPDATED SDBL	MDEQ 2013 UPDATED NRDC	MDEQ 2013 UPDATED Res DW Prot	MDEQ 2013 UPDATED Non-Res DW Prot	MDEQ 2013 UPDATED GSWI Prot	MDEQ 2013 UPDATED Inf Source VSIC	MDEQ 2013 UPDATED NON-RES PSIC	MDEQ 2013 UPDATED NON-RES SVIIC (SO)	MDEQ 2013 UPDATED CSAT	BW10-03 8 - 10 07/30/01 BW10-03-S(8-10)-N	BW10-03 12 - 14 07/30/01 BW10-03-S(12-14)-N	MWW10-02 0.6 - 2 01/28/02 BMWW10-02-S(0-2)	MWW10-02 0.6 - 2 01/28/02 BMWW10-02-S(0-2)DL	MWW10-02 8 - 10 01/28/02 BMWW10-02-S(8-10)	MWW10-02 8 - 10 01/28/02 BMWW10-02-S(8-10)DL
Detected Volatile Organics																
Acetone	- -	- -	73,000	15	42	34	160,000	170,000,000	**540,000**	110,000	0.0045 J	0.019	NA	0.022 U	NA	0.019 U
Benzene	- -	- -	840	0.1	0.1	4	45	470,000	**8.4**	400	0.00058 U	0.00063 U	NA	0.0054 U	NA	0.0049 U
2-Butanone	- -	- -	700,000	260	760	44	35,000	29,000,000	**99,000**	27,000	0.0024 J	0.0026 U	NA	0.022 U	NA	0.019 U
Carbon Disulfide	- -	- -	43,000	16	46	- -	1,600	21,000,000	**140**	280	0.00069 U	0.00075 U	NA	0.0054 U	NA	0.0049 U
Chloroethane	- -	- -	12,000	8.6	34	22	36,000	290,000,000	**5,300**	950	0.002 U	0.0066 J	NA	0.011 U	NA	0.0097 U
Cyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.00089 U	0.00097 U	NA	0.011 U	NA	0.0097 U
1,4-Dichlorobenzene	- -	- -	1,900	1.7	1.7	0.36	260	570,000	**100**	- -	0.00059 U	0.00065 U	NA	0.0054 U	NA	0.0049 U
Dichloromethane	- -	- -	5,800	0.1	0.1	30	700	8,300,000	**240**	2,300	0.0012 UJ	0.0013 UJ	NA	0.0054 U	NA	0.0049 U
Ethylbenzene	- -	- -	71,000	1.5	1.5	0.36	2,400	13,000,000	**460**	140	0.00052 U	0.00057 U	NA	0.0054 U	NA	0.0049 U
Isopropylbenzene	- -	- -	80,000	91	260	3.2	2,000	2,600,000	**730**	390	0.00062 U	0.00068 U	NA	0.0054 U	NA	0.0049 U
Methyl acetate	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.00098 U	0.0011 U	NA	0.011 U	NA	0.0097 U
Methylcyclohexane	- -	- -	- -	- -	- -	- -	- -	- -	**- -**	- -	0.00052 U	0.00057 U	NA	0.011 U	NA	0.0097 U
4-Methyl-2-pentanone	- -	- -	180,000	36	100	- -	53,000	- -	**- -**	2,700	0.0017 U	0.0018 U	NA	0.022 U	NA	0.019 U
Toluene	- -	- -	160,000	16	16	5.4	3,300	12,000,000	**610**	250	0.00048 J	0.00051 U	NA	0.0015 J	NA	0.002 J
1,1,1-Trichloroethane	- -	- -	1,000,000	4	4	1.8	4,500	29,000,000	**460**	460	0.00082 U	0.00089 U	NA	0.0054 U	NA	0.0049 U
Trichloroethene	- -	- -	660	0.1	0.1	4	14	59,000	**1.9**	500	0.00067 U	0.00074 U	NA	0.0054 U	NA	0.0049 U
Total Xylenes	- -	- -	1,000,000	5.6	5.6	0.98	54,000	130,000,000	**12,000**	150	0.0017 U	0.0018 U	NA	0.011 U	NA	0.0097 U
Detected Semivolatile Organics																
2-Methylnaphthalene	- -	- -	26,000	57	170	4.2	1,800	290,000	**4,900**	- -	0.055 U	0.056 U	0.34 U	NA	0.36 U	NA
Acenaphthene	- -	- -	130,000	300	880	8.7	97,000	6,200,000	**350,000**	- -	0.059 U	0.059 U	0.34 U	NA	0.36 U	NA
Acenaphthylene	- -	- -	5,200	5.9	17	- -	2,700	1,000,000	**3,000**	- -	0.054 U	0.055 U	0.34 U	NA	0.36 U	NA
Anthracene	- -	- -	730,000	41	41	- -	1,600,000	29,000,000	**1,000,000**	- -	0.056 U	0.057 U	0.34 U	NA	0.36 U	NA
Benzo(a)anthracene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.063 U	0.064 U	0.34 U	NA	0.36 U	NA
Benzo(a)pyrene	- -	- -	8	- -	- -	- -	- -	1,900	**- -**	- -	0.069 U	0.07 U	0.34 U	NA	0.36 U	NA
Benzo(b)fluoranthene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.067 U	0.068 U	0.34 U	NA	0.36 U	NA
Benzo(g,h,i)perylene	- -	- -	7,000	- -	- -	- -	- -	350,000	**- -**	- -	0.063 U	0.064 U	0.34 U	NA	0.36 U	NA
Benzo(k)fluoranthene	- -	- -	800	- -	- -	- -	- -	- -	**- -**	- -	0.061 U	0.062 U	0.34 U	NA	0.36 U	NA
bis(2-Ethylhexyl)phthalate	- -	- -	12,000	- -	- -	- -	- -	890,000	**- -**	10,000	0.062 U	0.063 U	0.34 U	NA	0.36 U	NA
Butylbenzylphthalate	- -	- -	120,000	2,200	5,000	120	- -	21,000,000	**- -**	310	0.059 U	0.059 U	0.34 U	NA	0.36 U	NA
Chrysene	- -	- -	8,000	- -	- -	- -	- -	- -	**- -**	- -	0.053 U	0.054 U	0.34 U	NA	0.36 U	NA
Dibenzo(a,h)anthracene	- -	- -	8	- -	- -	- -	- -	- -	**- -**	- -	0.059 U	0.059 U	0.34 U	NA	0.36 U	NA
Dibenzofuran	- -	- -	- -	- -	- -	1.7	160	2,900	**3,600**	- -	0.058 U	0.058 U	0.34 U	NA	0.36 U	NA
Fluoranthene	- -	- -	130,000	730	730	5.5	890,000	4,100,000	**1,000,000**	- -	0.064 U	0.065 U	0.34 U	NA	0.36 U	NA
Fluorene	- -	- -	87,000	390	890	5.3	150,000	4,100,000	**1,000,000**	- -	0.055 U	0.056 U	0.34 U	NA	0.36 U	NA
Indeno(1,2,3-cd)pyrene	- -	- -	80	- -	- -	- -	- -	- -	**- -**	- -	0.081 U	0.082 U	0.34 U	NA	0.36 U	NA
Phenanthrene	- -	- -	5,200	56	160	2.1	190	2,900	**5,100**	- -	0.06 U	0.061 U	0.34 U	NA	0.36 U	NA
Phenol	- -	- -	230,000	88	260	9	- -	18,000,000	**- -**	12,000	0.056 U	0.057 U	0.34 U	NA	0.36 U	NA
Pyrene	- -	- -	84,000	480	480	- -	780,000	2,900,000	**1,000,000**	- -	0.059 U	0.059 U	0.34 U	NA	0.36 U	NA
Naphthalene	- -	- -	52,000	35	100	0.73	350	88,000	**470**	- -	0.056 U	0.057 U	0.34 U	NA	0.36 U	NA

See Notes on last page.

Table 4-31 W-10 VOC-SVOC Soil
RACER - Pontiac North Campus

	Exceeds MDEQ 2013 Residential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Nonresidential Drinking Water Protection Criteria
	Exceeds MDEQ 2013 Groundwater Surface Water Interface ProtectionCriteria
Red text	Exceeds MDEQ 2013 State Default Background Levels
Underlined	Exceeds Site Specific Background Concentrations

Notes:
All units are measured in milligrams per kilogram (mg/kg).

Abbreviations:

CSAT	Soil Saturation Concentration Screening Level
ft BGS	feet below ground surface
GSWI	Groundwater Surface Water Interface
ID	Identification
Inf Source VSIC	Infinite Source Volatile Soil Inhalation Criteria
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Non-Res	Non-Residential
NRDC	Non-Residential Direct Contact
Prot	Protection
PSIC	Particulate Soil Inhalation Criteria
Res	Residential
SDBL	State Default Background Level
SSBC	Site Specific Background Concentration
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit

Other Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	INJ-01-17 10/02/18 INJ-01-17_GW-100218	INJ-02-18 10/02/18 INJ-02-18_GW-100218	MW-03-17 10/02/18 MW-03-17_GW-100218	MW-04-17 10/02/18 MW-04-17_GW-100218	MWW01-SEN03 02/19/13 MWW01-SEN03_021913	MWW01-SEN03 06/25/13 MWW01-SEN03_062513	MWW01-SEN03 12/03/13 MWW10-SEN03_20131203	MWW01-SEN03 10/05/18 MWW01-SEN03-GW-100518	MWW01-SEN04 10/03/12 MWW01-SEN04	MWW01-SEN04 02/19/13 MWW01-SEN04_021913
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	2 U	7	2 U	2 U	3.2	2.9 B	2.7 J	8	1.9 J	3.7
Barium	2,000	2,000	670	- -	- -	- -	48	163	47	60	57 B	61 B	65 J	170	95 B	120 B
Chromium	100	100	11	- -	- -	- -	5 U	5 U	5 U	5 U	23	12 B	8.5 J	29	5.3	2.2
Copper	1,000	1,000	13	- -	- -	- -	5 U	5 U	5 U	5 U	18	13 B	NA	16	NA	1.7 J
Iron	300	300	- -	- -	- -	- -	360	2,360	80	40	NA	NA	NA	21,100	NA	NA
Lead	4	4	14	- -	- -	- -	3 U	3 U	3 U	3 U	6.4 B	7.5 B	3.4 J	11	12	3.9 B
Manganese	50	50	1,300	- -	- -	- -	402	386	562	487	160 B	130 B	NA	477	NA	400 B
Mercury	2	2	0.0013	**56**	56	- -	0.2 U	0.2 U	0.2 U	0.2 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	5 U	30	6	5 U	21	12 B	NA	23	NA	3.4
Vanadium	4.5	62	27	- -	- -	- -	5 U	5 U	5 U	5 U	3.9 J	2.4 JB	NA	7	NA	0.48 J
Detected Inorganics-Filtered																
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Other Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW01-SEN04 06/25/13 MWW01-SEN04_062513	MWW01-SEN04 12/03/13 MWW10-SEN04_20131203	MWW01-SEN04 10/03/18 MWW01-SEN04_GW-100318	MWW01-SEN05 10/05/12 MWW01-SEN 05_100512	MWW01-SEN05 02/20/13 MWW01-SEN05_022013	MWW01-SEN05 06/26/13 MWW01-SEN05_062613	MWW01-SEN05 12/03/13 MWW10-SEN05_20131203	MWW10-SEN01 10/03/12 MWW10-SEN01	MWW10-SEN01 02/19/13 MWW10-SEN01_021913	MWW10-SEN01 06/25/13 MWW10-SEN01_062513
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	6.7 B	5.9 J [15 J]	5 [5]	1.5 J	0.71 J	1.3 JB	1.3 J	1.8 J	6.6	2.8 B
Barium	2,000	2,000	670	- -	- -	- -	160 B	160 J [370 J]	129 [128]	1,800 B	2,100 B	2,200 B	2,900 J	170 B	96 B	140 B
Chromium	100	100	11	- -	- -	- -	5.3 B	10 J [140 J]	5 U [5 U]	0.76 J	2.0 U	2.0 U	0.15 J	0.85 J	0.78 J	0.77 JB
Copper	1,000	1,000	13	- -	- -	- -	3.5 B	NA	5 U [5 U]	NA	0.80 J	1.7 JB	NA	NA	3.3	3.4 B
Iron	300	300	- -	- -	- -	- -	NA	NA	14,500	NA	NA	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	11 B	21 J [460 J]	4 [3]	7.0	1.4 B	4.2 B	1.4 J	0.54 J	0.42 JB	0.45 JB
Manganese	50	50	1,300	- -	- -	- -	400 B	NA	370 [369]	NA	72 B	62 B	NA	NA	880 B	1,200 B
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U [0.22]	0.2 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	7.8 B	NA	5 U [5 U]	NA	4.8	2.0 B	NA	NA	3.4	11 B
Vanadium	4.5	62	27	- -	- -	- -	0.78 JB	NA	5 U [5 U]	NA	4.0 U	4.0 U	NA	NA	0.30 J	4.0 U
Detected Inorganics-Filtered																
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Other Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW10-SEN01 12/04/13 MWW10-SEN01_20131204	MWW10-SEN01 05/18/16 MWW10-SEN01-GW-051816	MWW10-SEN02 10/03/12 MWW10-SEN02	MWW10-SEN02 06/26/13 MWW10-SEN02_062613	MWW10-SEN02 12/04/13 MWW10-SEN02_20131204	MWW10-SEN02 10/05/18 MWW10-SEN02-GW-100518	TW-MD-01 07/30/14 TW-MD-01(073014)	TW-MD-01 02/11/15 TW-MD-01 (02112015)	TW-MD-01 03/31/15 TW-MD-01 (03312015)	TW-MD-01 05/20/15 TW-MD-01_05202015
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	7.6 J	12	10	0.61 JB	1.4 J	7	3.4 B	1.2 J	1.4 JB	3.5 B [2.1 B]
Barium	2,000	2,000	670	- -	- -	- -	82 J	75 B	220 B	79 B	86 J	141	110 B	91 B	92	93 [93]
Chromium	100	100	11	- -	- -	- -	0.53 J	1.5 J	51	3.7 B	21 J	53	0.43 JB	1.5 JB	1.3 JB	1.6 JB [1.4 JB]
Copper	1,000	1,000	13	- -	- -	- -	NA	2.0 U	NA	26 B	NA	54	0.63 JB	2.0 U	2.0 U	0.86 JB [2 U]
Iron	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	21,200	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	1.0 UBJ	1.0 U	16	0.52 JB	1.2 J	12	0.39 JB	1.0 U	1.0 U	0.38 JB [0.11 JB]
Manganese	50	50	1,300	- -	- -	- -	NA	780	NA	640 B	NA	563	1,200	1,000	1,200	1,100 [1,200]
Mercury	2	2	0.0013	**56**	56	- -	0.15 J	0.20 U	0.20 U	0.20 U	0.20 U	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U [0.2 U]
Nickel	100	100	73	- -	- -	- -	NA	42 B	NA	210 B	NA	128	1.8 JB	1.3 J	1.1 J	1.4 JB [1.2 JB]
Vanadium	4.5	62	27	- -	- -	- -	NA	0.73 J	NA	0.60 JB	NA	21	4.0 U	0.55 JB	0.78 JB	1.7 JB [1.8 JB]
Detected Inorganics-Filtered																
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	13,000 B	13,000	14,000	13,000 B [14,000 B]
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	1,200	990	1,100 ^	1,100 [1,200]
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	0.20 U	0.20 U	0.20 U [0.2 U]

See Notes on last page.

Other Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-01 05/24/17 TW-MD-01_GW-052417	TW-MD-01 10/03/18 TW-MD-01_GW-100318	TW-MD-02 07/29/14 TW-MD-02(072914)	TW-MD-02 02/11/15 TW-MD-02 (02112015)	TW-MD-02 03/31/15 TW-MD-02 (03312015)	TW-MD-02 05/20/15 TW-MD-02_05202015	TW-MD-02 05/24/17 TW-MD-02_GW-052417	TW-MD-02 08/17/17 TW-MD-02_GW-081717	TW-MD-02 10/03/18 TW-MD-02_GW-100318	TW-MD-03 07/29/14 TW-MD-03(072914)	TW-MD-03 02/18/15 TW-MD-03(02182015)
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	NA	2 U	4.9 B	4.1	3.4 B	6.0 B	NA	NA	8	2.3 B	3.3 [3.2]
Barium	2,000	2,000	670	- -	- -	- -	NA	126	160 B	110 B	160	130	NA	NA	163	180 B	280 [270]
Chromium	100	100	11	- -	- -	- -	NA	5 U	0.46 JB	1.8 JB	1.7 JB	1.5 JB	NA	NA	5 U	0.60 JB	2.0 B [1.9 JB]
Copper	1,000	1,000	13	- -	- -	- -	NA	5 U	0.68 JB	2.0 U	2.0 U	2.0 U	NA	NA	5 U	1.0 JB	0.88 J [2 U]
Iron	300	300	- -	- -	- -	- -	7,220	10,800	NA	NA	NA	NA	14,000	14,400	14,300	NA	NA
Lead	4	4	14	- -	- -	- -	NA	3 U	0.59 JB	0.56 J	1.0 U	0.13 JB	NA	NA	3 U	0.66 JB	0.49 JB* [0.24 JB*]
Manganese	50	50	1,300	- -	- -	- -	971	1,000	1,400	1,900	1,400	1,300	917	NA	747	1,200	1,200 [1,100]
Mercury	2	2	0.0013	**56**	56	- -	NA	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U	NA	NA	0.2 U	0.20 U	0.20 U [0.2 U]
Nickel	100	100	73	- -	- -	- -	NA	5 U	2.7	8.4	4.5	4.3 B	NA	NA	5 U	4.2	2.0 [1.9 J]
Vanadium	4.5	62	27	- -	- -	- -	NA	5 U	0.19 J	0.61 JB	0.78 JB	1.5 JB	NA	NA	5 U	4.0 U	1.1 JB [0.59 JB]
Detected Inorganics-Filtered																	
Iron (dissolved)	300	300	- -	- -	- -	- -	6,890	NA	14,000 B	17,000	16,000	15,000 B	13,500	14,200	NA	6,400 B	20,000 B [19,000 B]
Manganese (dissolved)	50	50	1,300	- -	- -	- -	974	NA	1,300	1,700	1,300 ^	1,300	892	NA	NA	1,200	980 [960]
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	0.20 U	0.20 U	0.20 U	NA	NA	NA	NA	0.20 U [0.2 U]

See Notes on last page.

Other Groundwater Inorganics
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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-03 03/31/15 TW-MD-03 (03312015)	TW-MD-03 05/20/15 TW-MD-03_05202015	TW-MD-03 05/25/17 TW-MD-03_GW-052517	TW-MD-03 10/03/18 TW-MD-03_GW-100318	TW-MD-04 07/30/14 TW-MD-04(073014)	TW-MD-04 02/18/15 TW-MD-04(02182015)	TW-MD-04 03/31/15 TW-MD-04 (03312015)	TW-MD-04 05/20/15 TW-MD-04_05202015	TW-MD-04 04/24/17 TW-MD-04_GW-042417	TW-MD-04 05/24/17 TW-MD-04_GW-052417	TW-MD-04 10/03/18 TW-MD-04_GW-100318
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	3.2 B	3.8 B	NA	5	2.7 B [2.5 B]	2.2	2.3 B	2.9 B	NA	NA	2
Barium	2,000	2,000	670	- -	- -	- -	210	190	NA	309	160 B [160 B]	180	190	200	NA	NA	341
Chromium	100	100	11	- -	- -	- -	1.6 JB	1.9 JB	NA	5 U	0.37 JB [0.34 JB]	1.3 JB	1.5 JB	2.3 B	5 U	NA	5 U
Copper	1,000	1,000	13	- -	- -	- -	2.0 U	1.4 JB	NA	5 U	0.85 JB [0.82 JB]	2.0 U	2.0 U	2.0 U	5 U	NA	5 U
Iron	300	300	- -	- -	- -	- -	NA	NA	9,490	18,000	NA	NA	NA	NA	10,700	11,300	21,900
Lead	4	4	14	- -	- -	- -	0.12 J	0.76 JB	NA	3 U	0.45 JB [0.37 JB]	0.29 JB*	1.0 U	0.29 JB	3 U	NA	3 U
Manganese	50	50	1,300	- -	- -	- -	760	740	520	820	1,300 [1,200]	600	600	560	353	341	1,160
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	NA	0.2 U	0.20 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.2 U	NA	0.2 U
Nickel	100	100	73	- -	- -	- -	1.9 J	2.4 B	NA	5 U	7.1 B [6.7 B]	4.1	2.8	3.1	5 U	NA	5 U
Vanadium	4.5	62	27	- -	- -	- -	0.74 JB	1.9 JB	NA	5 U	4.0 U [4 U]	0.53 JB	0.87 JB	1.0 JB	5 U	NA	5 U
Detected Inorganics-Filtered																	
Iron (dissolved)	300	300	- -	- -	- -	- -	17,000	15,000 B	9,160	NA	6,300 B [6,700 B]	27,000 B	24,000	24,000 B	10,200	11,200	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	740 ^	680	529	NA	1,300 [1,300]	670	670 ^	580	369	345	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	NA	NA	NA	0.20 U	0.20 U	0.20 U	0.2 U	NA	NA

See Notes on last page.

Other Groundwater Inorganics
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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-05 07/30/14 TW-MD-05(073014)	TW-MD-05 02/18/15 TW-MD-05(02182015)	TW-MD-05 04/01/15 TW-MD-05 (04012015)	TW-MD-05 05/20/15 TW-MD-05_05202015	TW-MD-05 04/24/17 TW-MD-05_GW-042417	TW-MD-05 05/25/17 TW-MD-05_GW-052517	TW-MD-05 10/03/18 TW-MD-05_GW-100318	TW-MD-06 08/01/14 TW-MD-06(080114)	TW-MD-06 02/25/15 TW-MD-06 (02252015)	TW-MD-06 04/01/15 TW-MD-06 (04012015)	TW-MD-06 05/20/15 TW-MD-06_05202015
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	3.2 B	1.9 J	2.4 B	2.6 B	NA	NA	4	7.9 B	5.6	4.8 B	7.6 B
Barium	2,000	2,000	670	- -	- -	- -	98 B	81	87	86	NA	NA	95	160 B	140	120	120
Chromium	100	100	11	- -	- -	- -	0.52 JB	1.8 JB	1.6 JB	1.5 JB	5 U [5 U]	NA	5 U	0.48 JB	1.2 J	1.5 JB	2.2 B
Copper	1,000	1,000	13	- -	- -	- -	0.62 JB	2.0 U	2.0 U	2.0 U	5 U [5 U]	NA	5 U	1.1 JB	1.3 J	2.0 U	0.77 JB
Iron	300	300	- -	- -	- -	- -	NA	NA	NA	NA	13,900 [22,200]	12,600	11,500	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	0.70 JB	0.41 JB*	0.29 JB	0.11 JB	3 U [3 U]	NA	3 U	1.1 B	0.26 J	0.24 JB	0.50 JB
Manganese	50	50	1,300	- -	- -	- -	650	360	380	380	414 [807]	429	356	1,600	1,300 B	1,600	1,200
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.24	0.20 U	0.20 U	0.1 U [0.1 U]	NA	0.2 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	3.1 B	1.9 J	1.7 J	1.6 JB	5 U [5 U]	NA	5 U	2.9 B	1.6 J	1.1 J	1.5 J
Vanadium	4.5	62	27	- -	- -	- -	4.0 U	0.70 JB	0.63 JB	1.7 JB	5 U [5 U]	NA	5 U	4.0 U	0.66 J	0.61 JB	1.2 JB
Detected Inorganics-Filtered																	
Iron (dissolved)	300	300	- -	- -	- -	- -	8,600 B	15,000 B	16,000	15,000 B	13,200 [21,800]	12,400	NA	11,000 B	13,000	12,000	12,000 B
Manganese (dissolved)	50	50	1,300	- -	- -	- -	720	390	400	390	419 [718]	423	NA	1,600	1,300 B	1,500 ^	1,300
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	0.20 U	0.20 U	0.20 U	0.1 U [0.1 U]	NA	NA	NA	0.20 U	0.20 U	0.16 J

See Notes on last page.

Other Groundwater Inorganics
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ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-06 04/24/17 TW-MD-06_GW-042417	TW-MD-06 05/25/17 TW-MD-06_GW-052517	TW-MD-06 08/17/17 TW-MD-06_GW-081717	TW-MD-06 10/04/18 TW-MD-06_GW-100418	TW-MD-07 07/30/14 TW-MD-07(073014)	TW-MD-07 02/25/15 TW-MD-07 (02252015)	TW-MD-07 04/01/15 TW-MD-07 (04012015)	TW-MD-07 05/20/15 TW-MD-07_05202015	TW-MD-07 04/24/17 TW-MD-07_GW-042417	TW-MD-07 05/25/17 TW-MD-07_GW-052517	TW-MD-07 10/04/18 TW-MD-07_GW-100418
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	NA	NA	NA	10	2.6 B	1.3 J	1.7 JB [1.7 JB]	1.5 JB	NA	NA	2 U
Barium	2,000	2,000	670	- -	- -	- -	NA	NA	NA	180	230 B	280	280 [280]	280	NA	NA	206
Chromium	100	100	11	- -	- -	- -	5 U	NA	NA	5 U	0.33 JB	1.2 J	1.6 JB [1.5 JB]	2.1 B	5 U	NA	5 U
Copper	1,000	1,000	13	- -	- -	- -	5 U	NA	NA	5 U	0.50 JB	2.0 U	2.0 U [2 U]	2.0 U	5 U	NA	5 U
Iron	300	300	- -	- -	- -	- -	21,200	17,200	22,100	24,900	NA	NA	NA	NA	13,300	12,900	23,900
Lead	4	4	14	- -	- -	- -	3 U	NA	NA	3 U	0.28 JB	0.21 J	1.0 U [1 U]	0.18 JB	3 U	NA	3 U
Manganese	50	50	1,300	- -	- -	- -	738	634	NA	947	220	210 B	430 [430]	190	257	134	201
Mercury	2	2	0.0013	**56**	56	- -	0.1 U	NA	NA	0.2 U	0.20 U	0.20 U	0.20 U [0.2 U]	0.22	0.1 U	NA	0.2 U
Nickel	100	100	73	- -	- -	- -	5 U	NA	NA	5 U	1.4 JB	0.97 J	0.71 J [0.64 J]	0.76 J	5 U	NA	5 U
Vanadium	4.5	62	27	- -	- -	- -	5 U	NA	NA	5 U	4.0 U	0.54 J	0.63 JB [0.65 JB]	0.93 JB	5 U	NA	5 U
Detected Inorganics-Filtered																	
Iron (dissolved)	300	300	- -	- -	- -	- -	21,600	17,000	21,500	NA	20,000 B	23,000	28,000 [28,000]	23,000 B	12,800	12,800	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	736	630	NA	NA	220	200 B	460 [460]	180	278	134	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.1 U	NA	NA	NA	NA	0.20 U	0.20 U [0.2 U]	0.20 U	0.1 U	NA	NA

See Notes on last page.

Other Groundwater Inorganics
RACER - Pontiac North Campus

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Footnotes:

^	Instrument related quality control exceeds the control limits
*	Result exceeds Direct Contact criteria.

Other Misc. Groundwater
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	INJ-01-17 10/02/18 INJ-01-17_GW-100218	INJ-02-18 10/02/18 INJ-02-18_GW-100218	MW-03-17 10/02/18 MW-03-17_GW-100218	MW-04-17 10/02/18 MW-04-17_GW-100218	MWW01-SEN03 02/19/13 MWW01-SEN03_021913	MWW01-SEN03 06/25/13 MWW01-SEN03_062513	MWW01-SEN03 10/05/18 MWW01-SEN03-GW-100518
Detected Miscellaneous														
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	238	368	250	240	NA	NA	754
Ammonia Nitrogen	10	10	- -	- -	530,000	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Hardness	- -	- -	- -	- -	- -	- -	mg/L	244	246	199	221	NA	NA	137
pH	- -	- -	- -	- -	- -	- -	pH Units	NA	NA	NA	NA	NA	NA	NA
Phosphate, total	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Sulfate	250	250	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	562	556	532	536	NA	NA	1,110
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	3 U	4	3 U	3 U	NA	NA	249
Detected Dioxins/Furans														
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	3.1 JBq	96 U	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	170 B	80 Jq	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	8.6 JB	4.1 Jq	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	2.4 JBq	2.0 J	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	0.68 JBq	48 U	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	0.98 JB	48 U	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	9.9 U	9.6 U	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	6.6 JBq	4.2 Jq	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	21 JBq	16 Jq	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	4.1 JBq	48 U	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	9.8 JBq	2.9 J	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	50 U	48 U	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	9.9 U	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	1.0 J	9.6 U	NA

See Notes on last page.

Other Misc. Groundwater
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW01-SEN04 02/19/13 MWW01-SEN04_021913	MWW01-SEN04 06/25/13 MWW01-SEN04_062513	MWW01-SEN04 10/03/18 MWW01-SEN04_GW-100318	MWW01-SEN05 02/20/13 MWW01-SEN05_022013	MWW01-SEN05 06/26/13 MWW01-SEN05_062613	MWW10-SEN01 02/19/13 MWW10-SEN01_021913	MWW10-SEN01 06/25/13 MWW10-SEN01_062513
Detected Miscellaneous														
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	498	NA	NA	NA	NA
Ammonia Nitrogen	10	10	- -	- -	530,000	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	218	NA	NA	NA	NA
pH	- -	- -	- -	- -	- -	- -	pH Units	NA	NA	NA	NA	NA	NA	NA
Phosphate, total	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Sulfate	250	250	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	NA	NA	580	NA	NA	NA	NA
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	27	NA	NA	NA	NA
Detected Dioxins/Furans														
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	5.8 JB	4.0 Jq	NA	6.8 JB	7.3 J	100 U	95 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	19 JBq	25 J	NA	7.4 JB	18 J	7.3 JB	7.4 Jq
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	3.6 JBq	3.7 Jq	NA	2.1 JB	48 U	0.77 JB	48 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	8.0 JB	9.3 J	NA	2.1 JB	7.1 J	0.50 JBq	48 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	50 U	48 U	NA	1.5 JB	48 U	51 U	48 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	0.45 JBq	48 U	NA	51 U	48 U	51 U	48 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	4.5 JB	3.3 Jq	NA	1.1 J	48 U	51 U	48 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.0 JB	48 U	NA	51 U	48 U	51 U	48 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.9 JB	48 U	NA	1.1 J	48 U	51 U	48 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	0.96 JB	48 U	NA	51 U	48 U	51 U	48 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	50 U	48 U	NA	1.5 J	48 U	51 U	48 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	2.3 Jq	9.6 U	NA	10 U	9.5 U	10 U	9.5 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	9.4 JBq	9.3 J	NA	3.7 JB	25 J	0.50 JBq	48 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	10 JBq	9.5 Jq	NA	3.4 JB	6.8 Jq	2.0 JBq	48 U
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	9.7 JB	6.5 Jq	NA	3.7 JB	6.8 Jq	51 U	48 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	6.2 JBq	48 U	NA	51 U	48 U	51 U	48 U
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	3.7 JB	48 U	NA	51 U	48 U	51 U	48 U
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	4.8 Jq	NA	NA	10 U	NA	10 U	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	10 U	9.6 U	NA	10 U	9.5 U	10 U	9.5 U

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Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW10-SEN02 06/26/13 MWW10-SEN02_062613	MWW10-SEN02 10/05/18 MWW10-SEN02-GW-100518	TW-MD-01 05/24/17 TW-MD-01_GW-052417	TW-MD-01 10/03/18 TW-MD-01_GW-100318	TW-MD-02 07/29/14 TW-MD-02(072914)	TW-MD-02 05/24/17 TW-MD-02_GW-052417	TW-MD-02 10/03/18 TW-MD-02_GW-100318	TW-MD-03 05/25/17 TW-MD-03_GW-052517
Detected Miscellaneous															
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	NA	686	438	504	560 B	484	524	488
Ammonia Nitrogen	10	10	- -	- -	530,000	- -	mg/L	NA	NA	NA	NA	1.8	NA	NA	NA
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	362	441	314	NA	357	253	269
pH	- -	- -	- -	- -	- -	- -	pH Units	NA	NA	NA	NA	7.28 H	NA	NA	NA
Phosphate, total	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	0.59	NA	NA	NA
Sulfate	250	250	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	11	NA	NA	NA
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	NA	NA	714	630	680	678	620	726
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	10	12	NA	27	14	15
Detected Dioxins/Furans															
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	95 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	13 JB	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	1.1 JB	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	0.24 Jq	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	9.5 U	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	0.24 Jq	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.5 JBq	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	48 U	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	9.5 U	NA	NA	NA	NA	NA	NA	NA

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Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	TW-MD-03 10/03/18 TW-MD-03_GW-100318	TW-MD-04 05/24/17 TW-MD-04_GW-052417	TW-MD-04 10/03/18 TW-MD-04_GW-100318	TW-MD-05 07/30/14 TW-MD-05(073014)	TW-MD-05 05/25/17 TW-MD-05_GW-052517	TW-MD-05 10/03/18 TW-MD-05_GW-100318	TW-MD-06 08/01/14 TW-MD-06(080114)	TW-MD-06 05/25/17 TW-MD-06_GW-052517
Detected Miscellaneous															
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	460	458	422	5 U	496	456	430	452
Ammonia Nitrogen	10	10	- -	- -	530,000	- -	mg/L	NA	NA	NA	9.7	NA	NA	7.1	NA
Hardness	- -	- -	- -	- -	- -	- -	mg/L	294	179	390	NA	244	113	NA	524
pH	- -	- -	- -	- -	- -	- -	pH Units	NA	NA	NA	7.22 H	NA	NA	7.61	NA
Phosphate, total	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	0.4	NA	NA	0.4	NA
Sulfate	250	250	- -	- -	- -	- -	mg/L	NA	NA	NA	1.3	NA	NA	5.6	NA
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	1,180	728	1,700	620	696	586	910	1,138
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	28	20	37	NA	17	20	NA	34
Detected Dioxins/Furans															
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA

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Detected Miscellaneous										
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	434	604	494
Ammonia Nitrogen	10	10	- -	- -	530,000	- -	mg/L	NA	NA	NA
Hardness	- -	- -	- -	- -	- -	- -	mg/L	390	341	365
pH	- -	- -	- -	- -	- -	- -	pH Units	NA	NA	NA
Phosphate, total	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA
Sulfate	250	250	- -	- -	- -	- -	mg/L	NA	NA	NA
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	1,080	1,006	958
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	46	20	43
Detected Dioxins/Furans										
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA

See Notes on last page.

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
H	Sample was prepped or analyzed beyond the specified holding time
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
mg/L	Milligrams per liter
NA	Not applicable.
pg/L	Picrograms per liter
q	Result was qualitatively confirmed, but not quantitated.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	INJ-01-17 10/02/18 INJ-01-17_GW-100218	INJ-02-18 10/02/18 INJ-02-18_GW-100218	MW-03-17 10/02/18 MW-03-17_GW-100218	MW-04-17 10/02/18 MW-04-17_GW-100218	MWW01-SEN03 02/19/13 MWW01-SEN03_021913	MWW01-SEN03 06/25/13 MWW01-SEN03_062513	MWW01-SEN03 12/03/13 MWW10-SEN03_20131203	MWW01-SEN03 10/05/18 MWW01-SEN03-GW-100518	MWW01-SEN04 10/03/12 MWW01-SEN04
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.10 U	0.096 U	0.1 U	0.096 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.10 U	0.096 U	0.1 U	1.9
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.10 U	0.096 U	0.1 U	0.096 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.1 U	0.1 U	0.1 U	0.1 U	0.095 U	0.1 U	0.096 U	0.1 U	1.9

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW01-SEN04 02/19/13 MWW01-SEN04_021913	MWW01-SEN04 06/25/13 MWW01-SEN04_062513	MWW01-SEN04 12/03/13 MWW10-SEN04_20131203	MWW01-SEN04 10/03/18 MWW01-SEN04_GW-100318	MWW01-SEN05 10/05/12 MWW01-SEN 05_100512	MWW01-SEN05 02/20/13 MWW01-SEN05_022013	MWW01-SEN05 06/26/13 MWW01-SEN05_062613	MWW01-SEN05 12/03/13 MWW10-SEN05_20131203
Detected PCBs														
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.096 U	0.48 U [R]	0.1 U [0.1 U]	0.095 U	0.095 UH	0.095 U	0.096 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.59	0.32	6.8 J [15 J]	0.2 [0.1]	0.095 U	0.095 UH	0.095 U	0.096 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.096 U	0.48 U [R]	0.1 U [0.1 U]	0.095 U	0.095 UH	0.095 U	0.096 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.59	0.32	6.8 J [15 J]	0.2 [0.1]	0.095 U	0.095 U	0.095 U	0.096 U

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW10-SEN01 10/03/12 MWW10-SEN01	MWW10-SEN01 02/19/13 MWW10-SEN01_021913	MWW10-SEN01 06/25/13 MWW10-SEN01_062513	MWW10-SEN01 12/04/13 MWW10-SEN01_20131204	MWW10-SEN01 05/18/16 MWW10-SEN01-GW-051816	MWW10-SEN02 10/03/12 MWW10-SEN02	MWW10-SEN02 06/26/13 MWW10-SEN02_062613	MWW10-SEN02 12/04/13 MWW10-SEN02_20131204	TW-MD-01 07/30/14 TW-MD-01(073014)
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.095 U	0.095 UH	R	0.19 U	0.095 U	0.095 U	0.096 U	0.11 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.095 U	0.095 UH	R	0.19 U	0.095 U	0.095 U	0.096 U	0.11 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.095 U	0.095 UH	R	0.19 U	0.095 U	0.095 U	0.096 U	0.056 J
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.095 U	0.095 U	0.095 U	R	0.19 U	0.095 U	0.095 U	0.096 U	0.056 J

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-01 09/04/14 TW-MD-01_090414	TW-MD-01 02/11/15 TW-MD-01 (02112015)	TW-MD-01 03/31/15 TW-MD-01 (03312015)	TW-MD-01 05/20/15 TW-MD-01_05202015	TW-MD-01 10/03/18 TW-MD-01_GW-100318	TW-MD-02 07/29/14 TW-MD-02(072914)	TW-MD-02 09/04/14 TW-MD-02_090414	TW-MD-02 02/11/15 TW-MD-02 (02112015)	TW-MD-02 03/31/15 TW-MD-02 (03312015)
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.099 U	0.095 U	0.098 U	0.10 U [0.095 U]	0.1 U	0.10 U	0.097 U	0.095 U	0.095 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.099 U	0.095 U	0.098 U	0.10 U [0.095 U]	0.1 U	0.10 U	0.097 U	0.095 U	0.095 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.099 U	0.095 U	0.098 U	0.10 U [0.095 U]	0.1 U	0.10 U	0.097 U	0.095 U	0.095 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.099 U	0.095 U	0.098 U	0.1 U [0.095 U]	0.1 U	0.1 U	0.097 U	0.095 U	0.095 U

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-02 05/20/15 TW-MD-02_05202015	TW-MD-02 10/03/18 TW-MD-02_GW-100318	TW-MD-03 07/29/14 TW-MD-03(072914)	TW-MD-03 09/04/14 TW-MD-03_090414	TW-MD-03 02/18/15 TW-MD-03(02182015)	TW-MD-03 03/31/15 TW-MD-03 (03312015)	TW-MD-03 05/20/15 TW-MD-03_05202015	TW-MD-03 10/03/18 TW-MD-03_GW-100318	TW-MD-04 07/30/14 TW-MD-04(073014)
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.1 U	0.10 U	0.11 U	0.095 U [0.097 U]	0.095 U	0.095 U	0.1 U	0.10 U [0.097 U]
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.1 U	0.10 U	0.11 U	0.095 U [0.097 U]	0.095 U	0.095 U	0.1 U	0.10 U [0.097 U]
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.095 U	0.1 U	0.10 U	0.11 U	0.095 U [0.097 U]	0.095 U	0.095 U	0.1 U	0.10 U [0.097 U]
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.095 U	0.1 U	0.1 U	0.11 U	0.095 U [0.097 U]	0.095 U	0.095 U	0.1 U	0.1 U [0.097 U]

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-04 09/04/14 TW-MD-04_090414	TW-MD-04 02/18/15 TW-MD-04(02182015)	TW-MD-04 03/31/15 TW-MD-04 (03312015)	TW-MD-04 05/20/15 TW-MD-04_05202015	TW-MD-04 04/24/17 TW-MD-04_GW-042417	TW-MD-04 10/03/18 TW-MD-04_GW-100318	TW-MD-05 07/30/14 TW-MD-05(073014)	TW-MD-05 09/05/14 TW-MD-05_090514	TW-MD-05 02/18/15 TW-MD-05(02182015)
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.10 U [0.098 U]	0.095 U	0.10 U	0.099 U	0.1 U	0.1 U	0.099 U	0.10 U	0.097 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.10 U [0.098 U]	0.095 U	0.10 U	0.099 U	0.1 U	0.1 U	0.099 U	0.10 U	0.097 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.10 U [0.098 U]	0.095 U	0.10 U	0.099 U	0.1 U	0.1 U	0.099 U	0.10 U	0.097 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.1 U [0.098 U]	0.095 U	0.1 U	0.099 U	0.1 U	0.1 U	0.099 U	0.1 U	0.097 U

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-05 04/01/15 TW-MD-05 (04012015)	TW-MD-05 05/20/15 TW-MD-05_05202015	TW-MD-05 04/24/17 TW-MD-05_GW-042417	TW-MD-05 10/03/18 TW-MD-05_GW-100318	TW-MD-06 08/01/14 TW-MD-06(080114)	TW-MD-06 09/09/14 TW-MD-06_090914	TW-MD-06 02/25/15 TW-MD-06 (02252015)	TW-MD-06 04/01/15 TW-MD-06 (04012015)	TW-MD-06 05/20/15 TW-MD-06_05202015
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.10 U	0.098 U	0.1 U [0.1]	0.1 U	0.23	0.097 U	0.14	0.096 U	0.11
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.10 U	0.098 U	0.1 U [0.1 U]	0.1 U	0.098 U	0.17	0.095 U	0.070 J	0.097 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.10 U	0.098 U	0.1 U [0.1 U]	0.1 U	0.098 U	0.097 U	0.095 U	0.096 U	0.097 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.1 U	0.098 U	0.1 U [0.1] [0.1]	0.1 U	0.23	0.17	0.14	0.07 J	0.11

See Notes on last page.

Other Groundwater - PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	TW-MD-06 04/24/17 TW-MD-06_GW-042417	TW-MD-06 10/04/18 TW-MD-06_GW-100418	TW-MD-07 07/30/14 TW-MD-07(073014)	TW-MD-07 09/05/14 TW-MD-07_090514	TW-MD-07 02/25/15 TW-MD-07 (02252015)	TW-MD-07 04/01/15 TW-MD-07 (04012015)	TW-MD-07 05/20/15 TW-MD-07_05202015	TW-MD-07 04/24/17 TW-MD-07_GW-042417	TW-MD-07 10/04/18 TW-MD-07_GW-100418
Detected PCBs															
Aroclor-1242	0.5	0.5	0.2	**45**	- -	- -	0.1	0.1 U	0.11 U	0.099 U	0.10 U	0.10 U [0.1 U]	0.095 U	0.1 U	0.1 U
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.1 U	0.1 U	0.11 U	0.099 U	0.10 U	0.10 U [0.1 U]	0.095 U	0.1 U	0.1 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.1 U	0.1 U	0.11 U	0.099 U	0.10 U	0.10 U [0.1 U]	0.095 U	0.1 U	0.1 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.1	0.1 U	0.11 U	0.099 U	0.1 U	0.1 U [0.1 U]	0.095 U	0.1 U	0.1 U

See Notes on last page.

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
H	Sample was prepped or analyzed beyond the specified holding time
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
R	Rejected data
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Other Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	INJ-01-17 10/02/18 INJ-01-17_GW-100218	INJ-02-18 10/02/18 INJ-02-18_GW-100218	MW-01-17 04/26/17 MW-01-17_GW-042617	MW-01-17 07/20/17 MW-01-17_GW-072017	MW-01-17 10/26/17 MW-01-17_GW-102617	MW-01-17 01/15/18 MW-01-17_GW-011518	MW-01-17 10/03/18 MW-01-17_GW-100318	MW-03-17 10/02/18 MW-03-17_GW-100218	MW-04-17 10/02/18 MW-04-17_GW-100218
Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Volatile Organics-SIM															
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	3 U	3 U	3 U	3 U	1 U	NA	NA
Semivolatile Organics															
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	43	43	- -	**43**	43.4	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	85	350	10	**- -**	7,480	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	210	210	1.6	**210**	206	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Other Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	MWW01-SEN03 02/19/13 MWW01-SEN03_021913	MWW01-SEN03 06/25/13 MWW01-SEN03_062513	MWW01-SEN03 12/03/13 MWW10-SEN03_20131203	MWW01-SEN03 05/18/16 MWW10-SEN03-GW-051816	MWW01-SEN03 09/21/16 MWW10-SEN03_092116	MWW01-SEN03 04/27/17 MWW10-SEN03_GW-042717	MWW01-SEN03 10/27/17 MWW10-SEN03_GW-102717	MWW01-SEN03 10/05/18 MWW01-SEN03-GW-100518
Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	5.5 J	8.8 J	3.1 J	19 J	50 U	50 U	50 U	50 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	0.82 J	0.89 J	0.71 J	0.77 J	1	1 U	1	1 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	1.6 J	1.7 J	0.89 J	1.8 J	25 U	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	0.15 J	5.0 U	3.5 J	5.0 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	5 U	5 U	5 U	5 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	5 U	5 U	5 U	5 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.1	1.0	1.2	0.87 J	NA	1 U	2	1 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	0.44 J	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	5.0 U	5.0 U	5.0 U	5.0 U	5 U	1 U	1 U	1 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	0.62 J	0.77 J	1.4	1.1	NA	1 U	1	1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	2.3 J	1.4 J	0.83 J	3.1 J	50 U	50 U	50 U	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	0.14 J	0.19 J	0.23 J	1.0 U	1 U	1 U	1 U	1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 U	2.0 U	NA	NA	NA	NA
Volatile Organics-SIM														
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	NA	NA	10	19	26	26
Semivolatile Organics														
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	19 U	9.5 U	46 U	NA	NA	NA	NA	NA
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Anthracene	43	43	- -	**43**	43.4	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Carbazole	85	350	10	**- -**	7,480	- -	190 U	95 U	460 U	NA	NA	NA	NA	NA
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	77 U	38 U	190 U	NA	NA	NA	NA	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Fluoranthene	210	210	1.6	**210**	206	- -	19 U	9.5 U	46 U	NA	NA	NA	NA	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	38 U	19 U	93 U	NA	NA	NA	NA	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	96 U	48 U	230 U	NA	NA	NA	NA	NA

See Notes on last page.

Other Groundwater VOC-SVOC
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ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	MWW01-SEN04 10/03/12 MWW01-SEN04	MWW01-SEN04 02/19/13 MWW01-SEN04_021913	MWW01-SEN04 06/25/13 MWW01-SEN04_062513	MWW01-SEN04 12/03/13 MWW10-SEN04_20131203	MWW01-SEN04 05/18/16 MWW10-SEN04-GW-051816	MWW01-SEN04 09/20/16 MWW10-SEN04_092016	MWW01-SEN04 10/03/18 MWW01-SEN04_GW-100318	MWW01-SEN05 10/05/12 MWW01-SEN 05_100512
Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	2.0 J	1.5 J	7.4 J	25 U [25 U]	25	50 U	50 U [50 U]	3.5 J
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	6.1
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U	25 U	25 U [25 U]	0.57 J	25 U	25 U [25 U]	0.60 J
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5.0 U	5.0 U	5.0 U	9.9 [2.2 J]	5.0 U	5 U	5 U [5 U]	5.0 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	5 U	5 U [5 U]	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 UJ	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	5 U	5 U [5 U]	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.5	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	NA	1 U [1 U]	1.1
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	0.29 J
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5 U	5 U [5 U]	5.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	5.5
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5 U	1 U [1 U]	1.1 J
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	NA	1 U [1 U]	2.9
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U	50 U	50 U [50 U]	2.9 J	50 U	50 U [50 U]	0.45 J
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	0.27 J	1.0 U [1 U]	1.0 U	1 U	1 U [1 U]	3.7
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 U	2.0 U [2 U]	2.0 U	NA	NA	33
Volatile Organics-SIM														
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	NA	NA	NA	3 U	NA	NA
Semivolatile Organics														
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	3.8 U	9.5 U	3.8 U	10 U [9.6 U]	NA	NA	NA	2.4 U
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	2.0 J
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	4.2 J
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	12 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	0.96 J
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	12 U
Anthracene	43	43	- -	**43**	43.4	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	12 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	19 U	48 U	19 U	2.2 J [13 J]	NA	NA	NA	12 U
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	12 U
Carbazole	85	350	10	**- -**	7,480	- -	38 U	95 U	38 U	100 U [96 U]	NA	NA	NA	1.5 J
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	15 U	38 U	15 U	40 U [38 U]	NA	NA	NA	0.53 J
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	19 U	48 U	19 U	50 U [48 UB]	NA	NA	NA	5.7 J
Fluoranthene	210	210	1.6	**210**	206	- -	3.8 U	9.5 U	3.8 U	10 U [9.6 U]	NA	NA	NA	2.4 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	1.5 J
Phenanthrene	52	150	2	**1,000**	1,000	- -	0.53 J	19 U	7.6 U	20 U [19 U]	NA	NA	NA	1.8 J
Naphthalene	520	1,500	11	**31,000**	31,000	- -	19 U	48 U	19 U	50 U [48 U]	NA	NA	NA	7.8 J

See Notes on last page.

Other Groundwater VOC-SVOC
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Location ID: / Date Collected: / Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	MWW01-SEN05 02/20/13 MWW01-SEN05_022013	MWW01-SEN05 06/26/13 MWW01-SEN05_062613	MWW01-SEN05 12/03/13 MWW10-SEN05_20131203	MWW10-SEN01 10/03/12 MWW10-SEN01	MWW10-SEN01 02/19/13 MWW10-SEN01_021913	MWW10-SEN01 06/25/13 MWW10-SEN01_062513	MWW10-SEN01 12/04/13 MWW10-SEN01_20131204	MWW10-SEN01 05/18/16 MWW10-SEN01-GW-051816	MWW10-SEN02 10/03/12 MWW10-SEN02
Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	3.0 JB	1.8 J	1.6 J	25 U	25 U	3.8 J	25 U	17 J	25 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	6.6	4.2	5.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1.0 U	1.0 U	1.0 U	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.6
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	0.59 J	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5.0 U	5.0 U	0.75 J	5.0 U	5.0 U	5.0 U	2.7 J	5.0 U	0.13 J
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.53 J
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	6.2 J	18	10	27	1.8	1.0 UJ
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	4.7	1.0 U	1.0 U	1.0 U	1.0 U	10
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.1	1.1	1.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	0.36 J	0.38 J	0.29 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	5.0	3.9	3.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.2 J	1.1 J	0.89 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	2.8	3.4	2.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	0.39 J	50 U	50 U	50 U	50 U	0.42 J	50 U	3.5 J	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	2.2	1.1	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	27	15	13	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Volatile Organics-SIM															
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
Semivolatile Organics															
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	3.8 U	0.82 J	0.93 J	2.4 U	6.3 U	2.4 U	9.6 U	0.96 U	0.95 U
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	19 U	1.3 J	3.1 J	12 U	32 U	12 U	48 U	4.8 U	4.8 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	0.42 J	2.2 J	2.9 J	12 U	32 U	12 U	48 U	4.8 U	0.30 J
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	19 U	4.8 U	0.37 J	12 U	32 U	12 U	48 U	4.8 U	4.8 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	19 U	0.92 J	0.88 J	12 U	32 U	12 U	48 U	4.8 U	4.8 U
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	19 U	0.28 J	48 U	12 U	32 U	12 U	48 U	4.8 U	4.8 U
Anthracene	43	43	- -	**43**	43.4	- -	19 U	0.44 J	48 U	12 U	32 U	12 U	48 U	4.8 U	4.8 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	19 U	4.8 U	48 U	12 U	32 U	12 U	1.9 J	4.8 U	2.1 J
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	19 U	4.8 U	48 U	12 U	32 U	12 U	48 U	4.8 U	4.8 U
Carbazole	85	350	10	**- -**	7,480	- -	38 U	1.6 J	1.9 J	24 U	63 U	24 U	96 U	9.6 U	9.5 U
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	15 U	0.58 J	0.52 J	9.5 U	25 U	9.5 U	38 U	3.8 U	3.8 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	3.2 J	1.8 JB	48 UB	12 U	32 U	12 U	48 U	0.40 JB	4.8 U
Fluoranthene	210	210	1.6	**210**	206	- -	3.8 U	0.28 J	9.6 U	2.4 U	6.3 U	2.4 U	9.6 U	0.96 U	0.95 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	1.2 J	1.8 J	1.7 J	12 U	32 U	12 U	0.76 J	0.25 J	4.8 U
Phenanthrene	52	150	2	**1,000**	1,000	- -	7.6 U	1.7 J	0.53 J	4.8 U	13 U	4.8 U	19 U	1.9 U	1.9 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	1.8 J	6.6	7.4 J	12 U	32 U	12 U	48 U	4.8 U	2.2 J

See Notes on last page.

Other Groundwater VOC-SVOC
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Location ID: / Date Collected: / Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	MWW10-SEN02 02/19/13 MWW10-SEN02_021913	MWW10-SEN02 06/26/13 MWW10-SEN02_062613	MWW10-SEN02 12/04/13 MWW10-SEN02_20131204	MWW10-SEN02 09/20/16 MWW10-SEN02_092016	MWW10-SEN02 04/26/17 MWW10-SEN02_GW-042617	MWW10-SEN02 10/26/17 MWW10-SEN02_GW-102617	MWW10-SEN02 10/05/18 MWW10-SEN02-GW-100518	TW-MD-01 09/04/14 TW-MD-01_090414
Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	25 U	25 U	25 U	50 U	50 U	50 U	50 U	25 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5.0 U	5.0 U	0.43 J	5 U	5 U	5 U	5 U	5.0 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	1.0 U	1.0 U	1.0 U	5 U	5 U	5 U	5 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	5 U	5 U	5 U	5 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	0.16 J	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	NA	1 U	1 U	1 U	1.0 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5.0 U	5.0 U	5.0 U	5 U	5 U	5 U	5 U	5.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	5.0 U	5.0 U	5.0 U	5 U	1 U	1 U	1 U	5.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	NA	1 U	1 U	1 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1 U	1 U	1 U	1 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 U	NA	NA	NA	NA	2.0 U
Volatile Organics-SIM														
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	NA	14	16	11	NA	NA
Semivolatile Organics														
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	NA	0.95 U	9.6 U	NA	NA	NA	NA	10 U
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
Anthracene	43	43	- -	**43**	43.4	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	0.84 JB	48 U	NA	NA	NA	NA	3.4 JB
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	NA	4.8 U	0.98 J	NA	NA	NA	NA	4.7 JB
Carbazole	85	350	10	**- -**	7,480	- -	NA	9.5 U	96 U	NA	NA	NA	NA	100 U
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	NA	3.8 U	38 U	NA	NA	NA	NA	42 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	4.8 U	48 UB	NA	NA	NA	NA	1.9 JB
Fluoranthene	210	210	1.6	**210**	206	- -	NA	0.95 U	9.6 U	NA	NA	NA	NA	10 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U
Phenanthrene	52	150	2	**1,000**	1,000	- -	NA	1.9 U	19 U	NA	NA	NA	NA	21 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	4.8 U	48 U	NA	NA	NA	NA	52 U

See Notes on last page.

Other Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	TW-MD-01 12/21/16 TWMD-01-GW-122116	TW-MD-01 12/21/16 TWMD-01-GW-122116DL	TW-MD-01 04/26/17 TW-MD-01_GW-042617	TW-MD-01 10/03/18 TW-MD-01_GW-100318	TW-MD-02 09/04/14 TW-MD-02_090414	TW-MD-02 10/03/18 TW-MD-02_GW-100318	TW-MD-03 09/04/14 TW-MD-03_090414	TW-MD-03 12/20/16 TWMD-03-GW-122016	TW-MD-03 12/20/16 TWMD-03-GW-122016DL
Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	50 U	NA	50 U	50 U	7.5 J	50 U	25 U	50 U	NA
Benzene	5	5	200	**35,000**	1,750,000	68,000	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	NA	25 U	25 U	25 U	25 U	25 U	25 U	NA
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5 U	NA	5 U	5 U	5.0 U	5 U	5.0 U	5 U	NA
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	5 U	NA	5 U	5 U	1.0 U	5 U	1.0 U	5 U	NA
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	5 U	NA	5 U	5 U	1.0 U	5 U	1.0 U	5 U	NA
Chloroform	80	80	350	**180,000**	7,920,000	- -	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5 U	NA	5 U	5 U	5.0 U	5 U	5.0 U	5 U	NA
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1 U	NA	1 U	1 U	5.0 U	1 U	5.0 U	1 U	NA
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	NA	50 U	50 U	50 U	50 U	50 U	50 U	NA
Toluene	790	790	270	**530,000**	526,000	61,000	1 U	NA	1 U	1 U	1.0 U	1 U	1.0 U	1 U	NA
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	NA	NA	NA	2.0 U	NA	2.0 U	NA	NA
Volatile Organics-SIM															
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	5 UB	3 U	1 U	NA	NA	NA	NA	5 UB
Semivolatile Organics															
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	NA	NA	NA	NA	10 U	NA	9.6 U	NA	NA
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
Anthracene	43	43	- -	**43**	43.4	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	NA	NA	NA	2.9 JB	NA	2.5 JB	NA	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	NA	NA	NA	NA	4.8 JB	NA	48 U	NA	NA
Carbazole	85	350	10	**- -**	7,480	- -	NA	NA	NA	NA	100 U	NA	96 U	NA	NA
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	NA	NA	NA	NA	40 U	NA	38 U	NA	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	NA	NA	NA	1.7 JB	NA	0.76 JB	NA	NA
Fluoranthene	210	210	1.6	**210**	206	- -	NA	NA	NA	NA	10 U	NA	9.6 U	NA	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	NA	NA	NA	NA	20 U	NA	19 U	NA	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	NA	NA	NA	50 U	NA	48 U	NA	NA

See Notes on last page.

Other Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	TW-MD-03 10/03/18 TW-MD-03_GW-100318	TW-MD-04 09/04/14 TW-MD-04_090414	TW-MD-04 10/03/18 TW-MD-04_GW-100318	TW-MD-05 09/05/14 TW-MD-05_090514	TW-MD-05 12/20/16 TWMD-05-GW-122016	TW-MD-05 12/20/16 TWMD-05-GW-122016DL	TW-MD-05 10/03/18 TW-MD-05_GW-100318	TW-MD-06 09/09/14 TW-MD-06_090914	TW-MD-06 10/04/18 TW-MD-06_GW-100418
Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	50 U	25 U [25 U]	50 U	4.2 J	50 U	NA	50 U	25 U	50 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U [25 U]	25 U	25 U	25 U	NA	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5 U	5.0 U [5 U]	5 U	5.0 U	5 U	NA	5 U	5.0 U	5 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	5 U	1.0 U [1 U]	5 U	1.0 U	5 U	NA	5 U	1.0 U	5 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	5 U	1.0 U [1 U]	5 U	1.0 U	5 U	NA	5 U	1.0 U	5 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5 U	5.0 U [5 U]	5 U	5.0 U	5 U	NA	5 U	5.0 U	5 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1 U	5.0 U [5 U]	1 U	5.0 U	1 U	NA	1 U	5.0 U	1 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U [50 U]	50 U	50 U	50 U	NA	50 U	50 U	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	1 U	1.0 U [1 U]	1 U	1.0 U	1 U	NA	1 U	1.0 U	1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	2.0 U [2 U]	NA	2.0 U	NA	NA	NA	2.0 U	NA
Volatile Organics-SIM															
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	NA	NA	NA	NA	4 UB	NA	NA	NA
Semivolatile Organics															
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	NA	9.6 U [9.6 U]	NA	9.6 U	NA	NA	NA	9.6 U*	NA
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U*	NA
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U*	NA
Anthracene	43	43	- -	**43**	43.4	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	3.5 JB [2.3 JB]	NA	2.4 JB	NA	NA	NA	7.0 JB	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA
Carbazole	85	350	10	**- -**	7,480	- -	NA	96 U [96 U]	NA	96 U	NA	NA	NA	96 U	NA
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	NA	38 U [38 U]	NA	38 U	NA	NA	NA	38 U*	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	2.8 JB [2.6 JB]	NA	1.4 JB	NA	NA	NA	1.8 JB	NA
Fluoranthene	210	210	1.6	**210**	206	- -	NA	9.6 U [9.6 U]	NA	9.6 U	NA	NA	NA	9.6 U	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U*	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	NA	19 U [19 U]	NA	19 U	NA	NA	NA	19 U	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	48 U [48 U]	NA	48 U	NA	NA	NA	48 U	NA

See Notes on last page.

Other Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 Updated Res DW	MDEQ 2013 Updated Non-Res DW	MDEQ 2013 Updated GSWI	MDEQ 2013 Updated NON-RES SVIIC	MDEQ 2013 Updated Water Solubility	MDEQ 2013 Updated Flam-Expl	TW-MD-07 09/05/14 TW-MD-07_090514	TW-MD-07 12/20/16 TWMD-07-GW-122016	TW-MD-07 10/04/18 TW-MD-07_GW-100418
Volatile Organics									
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	25 U	50 U	50 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1 U	1 U
Bromodichloromethane	80	80	- -	**37,000**	6,740,000	- -	1.0 U	1 U	1 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5.0 U	5 U	5 U
Chlorodibromomethane	80	80	- -	**110,000**	2,600,000	- -	1.0 U	5 U	5 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	5 U	5 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1 U	1 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1 U	1 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1 U	1 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5.0 U	5 U	5 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1 U	1 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	5.0 U	1 U	1 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1 U	1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U	50 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1 U	1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	NA	NA
Volatile Organics-SIM									
1,4-Dioxane	7.2	350	280	**- -**	900,000,000	140,000,000	NA	3 U	NA
Semivolatile Organics									
1,1'-Biphenyl	- -	- -	- -	**- -**	- -	- -	9.6 U	NA	NA
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	48 U	NA	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	48 U	NA	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	48 U	NA	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	48 U	NA	NA
Acenaphthylene	52	150	- -	**3,900**	3,930	- -	48 U	NA	NA
Anthracene	43	43	- -	**43**	43.4	- -	48 U	NA	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	2.9 JB	NA	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	48 U	NA	NA
Carbazole	85	350	10	**- -**	7,480	- -	96 U	NA	NA
Dibenzofuran	- -	- -	4	**10,000**	10,000	- -	38 U	NA	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	1.3 JB	NA	NA
Fluoranthene	210	210	1.6	**210**	206	- -	9.6 U	NA	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	48 U	NA	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	19 U	NA	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	48 U	NA	NA

See Notes on last page.

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Footnote:

*	Result exceeds Direct Contact criteria.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD10 01/22/02 DWD10-GW	DWD10 11/12/02 DWD10-GW02	DWD10 05/19/03 DWD10W(141-151)	DWD10 12/11/03 DWD10GW(141-151)	DWD10 05/03/04 DWD10GW	DWD10 10/26/04 DWD10-GW-102604	DWD10 05/11/05 DWD10-GW-051105	DWD10 11/02/05 DWD10-GW-110205FD	DWD10 05/17/06 DWD10-GW-051706TB	DWD10 11/13/06 DWD10-WG-1113-06
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	10.0 U	4.4 J	14.5 J	5.5 J	6.9 J	5.3 J	10.4	6.1 J	7.2	7.4
Barium	2,000	2,000	670	- -	- -	- -	126	148	160 J	150	146	146	168	154	151	153
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	3.4 J	3.3 J	9.1 J	3.5 J	10.0 U	10.0 U	6.3 J	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	0.76 J	20.0 U	5.2 J	20.0 U	1.0 J	2.6 J	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	1.6 J	3.0 U	3.0 U	3.0 U	3.0	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	10.0 U	29.6	32.6 J	24.3	24.3	22.8	38.7	22.9 J	25.1 J	26.2 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	3.0 J	4.8 J	9.9 J	3.9 J	20.0 U	20.0 U	6.7 J	20.0 U	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 UJ	0.040 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 UJ	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	20.0 UJ	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	115	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	34.5 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD10 05/02/07 DWD10-GW-05-02-07	DWD10 11/07/07 DWD10-GW-110707	DWD10 05/07/08 DWD10-GW-050708	DWD10 11/06/08 DWD10-GW-110608	DWD12 01/18/02 DWD12-GW	DWD12 11/12/02 DWD12-GW02	DWD12 05/20/03 DWD12W(115-125)	DWD12 12/17/03 DWD12GW(115-125)	DWD12 05/04/04 DWD12GW	DWD12 10/27/04 DWD12-GW-102704	DWD12 05/13/05 DWD12-GW-051305
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	9.3	8.4	6.7	6.0	31.2	39.5	36.4	41.3	41.3	38.4	39.6
Barium	2,000	2,000	670	- -	- -	- -	167	155	492 J	477 J	215	585	494	523	490	481	481
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	2.4 J	9.8 J	5.8 J	4.9 J	10.0 U	8.4 J	4.7 J	6.8 J	7.4 J	2.7 J	10.8
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	4.0 J	20.0 U	20.0 U	20.0 U	8.4 J	20.0 U	6.7 J	4.5 J	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.9 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	26.7	27.6	21.2 J	19.5 J	10.0 U	67.5	59.7 J	56.2 J	54.8	52.2	61.5
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	2.1 J	7.6 J	20.0 U	4.6 J	20.0 U	9.3 J	3.1 J	3.8 J	6.1 J	20.0 U	9.6 J
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	52.3	20.0 U	20.0 U	20.0 U	20.0 U	23.0	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																	
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	25.0 U	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	25.9	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	202	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD12 11/04/05 DWD12-GW-110405	DWD12 05/18/06 DWD12-GW-051806EB	DWD12 11/10/06 DWD12-WG-111006	DWD12 05/04/07 DWD12-GW-05-04-07	DWD12 11/09/07 DWD12-GW-110907	DWD12 05/08/08 DWD12-GW-050808	DWD12 11/06/08 DWD12-GW-110608	GWD8 09/14/01 GWD8-GW(63-73)-N	GWD8 01/10/02 GWD8-GW	GWD8 05/21/03 GWD8W(62-72)
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	40.9	39.1 [1.6 J]	36.2 J	39.4 [39.4]	34.4 [36.1]	36.3 [36.7]	33.4	3.9 U	10.0 U	7.5 J
Barium	2,000	2,000	670	- -	- -	- -	410	373 [31.1]	394	421 [457]	476 [460]	461 J [476 J]	441 J	238	363	458
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	0.28 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	2.6 J	16.0 [3.3 J]	1.9 J	10.0 U [10 U]	6.4 J [4.8 J]	10.0 U [10 U]	30.2	1.4 U	3.8 J	2.3 J
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U [20 U]	6.4 J	20.0 U [20 U]	20.0 U [20 U]	20.0 U [20 U]	13.6 J	1.3 U	2.2 J	1.1 J
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	6.4	4.2 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U [3 U]	3.0 U	3.0 U [3 U]	3.0 U [3 U]	3.0 U [3 U]	3.0 U	2.5 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	51.3	57.7 [13.8]	51.5 J	44.1 [47.6]	55.9 [53.3]	47.9 J [49.8 J]	98.9 J	71.2	67.0 J	45.1
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U [0.2 U]	0.20 U	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U	0.069 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	9.5 J [2.4 J]	2.4 J	20.0 U [20 U]	5.3 J [3.5 J]	20.0 U [20 U]	21.2	2.2 U	7.2 J	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	1.5 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	5.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U [10 U]	10.0 U	10.0 U [10 U]	10.0 U [10 U]	10.0 U [10 U]	2.3 J	0.82 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	22.2 [11.5 J]	20.0 U	20.0 U [20 U]	20.0 U [20 U]	20.0 U [20 U]	20.0 U	12.0 U	16.5 J	20.0 U
Detected Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	2.2 U	25.0 U	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	3.9 U	4.4 J	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	252	358	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.28 U	5.0 U	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.4 U	2.3 J	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.3 U	2.4 J	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	70.3	64.1 J	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	0.072 J	0.20 U	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	2.2 U	6.4 J	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	5.0 U	1.0 U	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.82 U	10.0 U	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	12.0 U	23.6	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD8 12/12/03 GWD8GW(63-73)	GWD8 05/05/04 GWD8GW	GWD8 10/26/04 GWD8-GW-102604	GWD8 05/11/05 GWD8-GW-051105	GWD8 11/02/05 GWD8-GW-110205FD	GWD8 05/17/06 GWD8-GW-051706	GWD8R 11/13/06 GWD8R-WG-111306	GWD8R 05/03/07 GWD8R-GW-05-03-07	GWD8R 11/08/07 GWD8R-GW-110807	GWD8R 05/09/08 GWD8R-GW-050908
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	8.8 J	8.6 J	6.2 J	9.1 J	7.0 J	6.4	5.0 U	1.3 J	2.2	2.8
Barium	2,000	2,000	670	- -	- -	- -	449	483	526	522	541	526	355	485	462 J	494 J
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	21.4	4.1 J	10.0 U	10.0 U	4.5 J	4.1 J	25.8	10.0 U	6.2 J	4.2 J
Cobalt	40	100	100	- -	- -	- -	6.3 J	5.9 J	1.8 J	1.3 J	1.3 J	1.3 J	3.7 J	4.1 J	20.0 U	1.9 J
Copper	1,000	1,000	13	- -	- -	- -	4.5 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.9 J	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	63.8 J	43.6	41.6	55.4	51.6 J	47.5 J	93.6 J	55.8	52.7 J	39.0 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	16.0 J	5.4 J	3.9 J	20.0 U	3.5 J	3.4 J	15.4 J	20.0 U	4.7 J	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	21.8	20.0 U	18.8 J	20.0 U	14.0 J	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD8R 11/05/08 GWD8R-GW-110508	GWD9 01/22/02 GWD9-GW	GWD9 11/12/02 GWD9-GW02	GWD9 05/19/03 GWD9W(72-82)	GWD9 12/11/03 GWD9GW(72-82)	GWD9 05/03/04 GWD9GW	GWD9 10/26/04 GWD9-GW-102604	GWD9 05/11/05 GWD9-GW-051105	GWD9 11/02/05 GWD9-GW-110205FD	GWD9 05/17/06 GWD9-GW-051706TB	GWD9 11/13/06 GWD9-WG-1113-06
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	2.9	8.8 J	8.1 J	6.1 J	5.5 J	7.1 J	4.8 J	8.2 J	6.2 J	7.1	6.3
Barium	2,000	2,000	670	- -	- -	- -	490 J	414	422	399 J	374	434	428	436	464	494	445
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 UJ	0.36 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	4.3 J	7.5 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	3.7 J	20.0 U	20.0 U	1.4 J	1.3 J	20.0 U	13.4 J	1.5 J	1.5 J	2.2 J	14.6 J
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	37.4 J	10.0 U	28.1	31.2 J	21.8	17.8	18.9 U	19.0	19.6 J	23.6 J	21.4 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U	3.9 J	5.0 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 UJ	0.065 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 UJ	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 UJ	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	12.6 J	20.0 U
Detected Inorganics-Filtered																	
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	25.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	7.1 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	373	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	0.20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD9 05/02/07 GWD9-GW-05-02-07	GWD9 11/08/07 GWD9-GW-110807	GWD9 05/07/08 GWD9-GW-050708	GWD9 11/06/08 GWD9-GW-110608	GWD11 01/29/02 GWD11-GW	GWD11 11/12/02 GWD11-GW02	GWD11 05/20/03 GWD11W(86-96)	GWD11 12/17/03 GWD11GW(86-96)	GWD11 05/04/04 GWD11GW	GWD11 10/27/04 GWD11-GW-102704	GWD11 05/12/05 GWD11-GW-051205
Detected Inorganics																	
Arsenic	10	10	10	- -	- -	- -	6.8	6.6	8.1	7.5	5.9 J	3.1 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Barium	2,000	2,000	670	- -	- -	- -	478	458 J	166 J	162 J	102	336	36.0	32.9	41.2	86.3	90.0
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.30 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	3.3 J	10.0 U	7.7 J	3.4 J	2.8 J	4.3 J	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	20.0 UJ	20.0 U	0.76 J	2.2 J	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.4 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	17.8	20.0 J	26.5 J	23.3 J	72.6	255	46.1 J	29.8 U	27.8	78.8	137
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	6.7 J	5.3 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	6.5 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																	
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	2.7 J	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	5.2 J	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	98.9	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	61.8	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD11 11/04/05 GWD11-GW-110405	GWD11 05/18/06 GWD11-GW-051806EB	IWD7 09/11/01 IWD7-GW(30-40)	IWD7 01/09/02 IWD7-GW	IWD7 11/13/02 IWD7-GW02	IWD7 05/21/03 IWD7W(29-39)	IWD7 12/12/03 IWD7GW(30-40)	IWD7 05/05/04 IWD7GW	IWD7 10/26/04 IWD7-GW-102604	IWD7 05/11/05 IWD7-GW-051105	IWD7 11/02/05 IWD7-GW-110205FD	IWD7 05/17/06 IWD7-GW-051706
Detected Inorganics																		
Arsenic	10	10	10	- -	- -	- -	10.0 U	1.9 J	5.2 J	4.4 J	2.7 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	1.4 J
Barium	2,000	2,000	670	- -	- -	- -	38.2	31.9	432	67.7	413	390	379	305	355	353	418	404
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	0.28 J	0.57 J	5.0 U	5.0 U	0.37 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	7.6 J	3.7 J	10.0 U	6.8 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	1.4 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	13.5	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	39.9	13.8	177	63.1	142 J	80.9	94.7 J	77.6	86.7	78.2	86.1 J	78.1 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	5.8 J	2.6 J	20.0 U	5.7 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	10.0 U	0.044 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	4.9 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	6.9 J	6.7 J	20.0 U	592	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	21.0	8.8 J
Detected Inorganics-Filtered																		
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	25.0 U	25.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	6.2 J	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	404	40.0	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	5.0 U	0.28 J	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	10.0 U	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	159	2.8 J	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	0.20 U	0.20 U	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	10.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	10.0 U	2.5 J	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	IWD7R 11/13/06 IWD7R-WG-111306	IWD7R 05/04/07 IWD7R-GW-050407	IWD7R 10/22/07 IWD7R-GW-102207	IWD7R 11/08/07 IWD7R-GW-110807	IWD7R 05/08/08 1WD7R-GW-050808	IWD7R 11/05/08 IWD7R-GW-110508	MWD6 09/11/01 MWD6-GW(5-15)	MWD6 01/09/02 MWD6-GW	MWD6 11/13/02 MWD6-GW02	MWD6 05/21/03 MWD6W(5-15)	MWD6 12/12/03 MWD6GW(5-15)	MWD6 05/05/04 MWD6GW
Detected Inorganics																		
Arsenic	10	10	10	- -	- -	- -	5.7	10.2	8.6	11.1	7.1	7.8	5.4 J	10.0 U	2.9 J	10.0 U	4.4 J	3.2 J
Barium	2,000	2,000	670	- -	- -	- -	291	373	NA	301 J	323 J	330 J	532	166	220	1,090	66.1	2,030
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.38 J
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	NA	13.2	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	1.1 J	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	NA	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	0.87 J	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.3 J	4.0 J	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	NA	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	1.9 J	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	66.1 J	42.7	NA	63.8 J	37.0 J	45.5 J	393	131	191 J	617	55.1 J	1,080
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.11 J	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U	NA	9.7 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	4.9 J	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	10.0 U	1.0 U	1.0 U	1.0 U	0.039 J	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	NA	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	0.97 J	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	NA	19.8 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																		
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	NA	25.0 U	25.0 U	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	NA	5.3 J	10.0 U	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	NA	520	157	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	NA	5.0 U	0.35 J	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	383	125	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	0.20 U	0.20 U	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	10.0 U	1.0 U	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	NA	10.0 U	10.0 U	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWD6 05/17/04 MWD6GW051704	MWD6 10/26/04 MWD6-GW-102604	MWD6 05/11/05 MWD6-GW-051105	MWD6 11/02/05 MWD6-GW-110205FD	MWD6 05/17/06 MWD6-GW-051706	MWD6R 11/13/06 MWD6R-WG-111306	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808	MWD6R 11/05/08 MWD6R-GW-110508
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	3.4 J	10.0 U	4.3 J	4.7 J	2.5	2.8 U	1.4 J	2.2	1.3 J	1.5 J
Barium	2,000	2,000	670	- -	- -	- -	1,520	56.2	495	58.0	66.3	145	62.7	69.9 J	137 J	185 J
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	2.0 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	2.7 J	3.4 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	918	59.2	492	80.9 J	91.8 J	126 J	78.4	38.5 J	117 J	194 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U	4.5 J	2.7 J	1.6 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium	2	2	3.7	- -	- -	- -	0.041 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	0.90 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	15.8 J	20.0 U	9.1 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	4.3 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	0.50 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	900	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	0.41 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-4 (SHI) 4-70 Groundwater Inorganics
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Footnote:

*	Result exceeds Direct Contact criteria.

Table 4-4 (SHI) 4-70A Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWD6R 11/12/07 MWD6R-GW-111207
Detected Miscellaneous								
pH (water)	- -	- -	- -	- -	- -	- -	none	8.6 J [8.7 J]

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	DWD10 01/22/02 DWD10-GW	DWD10 11/12/02 DWD10-GW02	DWD10 05/19/03 DWD10W(141-151)	DWD10 12/11/03 DWD10GW(141-151)	DWD10 05/03/04 DWD10GW	DWD10 10/26/04 DWD10-GW-102604	DWD10 05/11/05 DWD10-GW-051105	DWD10 11/02/05 DWD10-GW-110205FD	DWD10 05/17/06 DWD10-GW-051706TB	DWD10 11/13/06 DWD10-WG-1113-06	DWD10 05/02/07 DWD10-GW-05-02-07	DWD10 11/07/07 DWD10-GW-110707	DWD10 05/07/08 DWD10-GW-050708
Detected PCBs																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	DWD10 11/06/08 DWD10-GW-110608	DWD12 01/18/02 DWD12-GW	DWD12 11/12/02 DWD12-GW02	DWD12 05/20/03 DWD12W(115-125)	DWD12 12/17/03 DWD12GW(115-125)	DWD12 05/04/04 DWD12GW	DWD12 10/27/04 DWD12-GW-102704	DWD12 05/13/05 DWD12-GW-051305	DWD12 11/04/05 DWD12-GW-110405	DWD12 05/18/06 DWD12-GW-051806EB	DWD12 11/10/06 DWD12-WG-111006	DWD12 05/04/07 DWD12-GW-05-04-07	DWD12 11/09/07 DWD12-GW-110907
Detected PCBs																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- - [- -]	- -	- - [- -]	- - [- -]

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	DWD12 05/08/08 DWD12-GW-050808	DWD12 11/06/08 DWD12-GW-110608	GWD8 09/14/01 GWD8-GW(63-73)DISS-N	GWD8 09/14/01 GWD8-GW(63-73)-N	GWD8 01/10/02 GWD8-GW	GWD8 05/21/03 GWD8W(62-72)	GWD8 12/12/03 GWD8GW(63-73)	GWD8 05/05/04 GWD8GW	GWD8 10/26/04 GWD8-GW-102604	GWD8 05/11/05 GWD8-GW-051105	GWD8 11/02/05 GWD8-GW-110205FD	GWD8 05/17/06 GWD8-GW-051706	GWD8R 11/13/06 GWD8R-WG-111306
Detected PCBs																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- - [- -]	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	GWD8R 05/03/07 GWD8R-GW-05-03-07	GWD8R 11/08/07 GWD8R-GW-110807	GWD8R 05/09/08 GWD8R-GW-050908	GWD8R 11/05/08 GWD8R-GW-110508	GWD9 01/22/02 GWD9-GW	GWD9 11/12/02 GWD9-GW02	GWD9 05/19/03 GWD9W(72-82)	GWD9 12/11/03 GWD9GW(72-82)	GWD9 05/03/04 GWD9GW	GWD9 10/26/04 GWD9-GW-102604	GWD9 05/11/05 GWD9-GW-051105	GWD9 11/02/05 GWD9-GW-110205FD	GWD9 05/17/06 GWD9-GW-051706TB
Detected PCBs																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	GWD9 11/13/06 GWD9-WG-1113-06	GWD9 05/02/07 GWD9-GW-05-02-07	GWD9 11/08/07 GWD9-GW-110807	GWD9 05/07/08 GWD9-GW-050708	GWD9 11/06/08 GWD9-GW-110608	GWD11 01/29/02 GWD11-GW	GWD11 11/12/02 GWD11-GW02	GWD11 05/20/03 GWD11W(86-96)	GWD11 12/17/03 GWD11GW(86-96)	GWD11 05/04/04 GWD11GW	GWD11 10/27/04 GWD11-GW-102704	GWD11 05/12/05 GWD11-GW-051205	GWD11 11/04/05 GWD11-GW-110405
Detected PCBs																				
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	GWD11 05/18/06 GWD11-GW-051806EB	IWD7 09/11/01 IWD7-GW(30-40)	IWD7 09/11/01 IWD7-GW(30-40)D	IWD7 01/09/02 IWD7-GW	IWD7 11/13/02 IWD7-GW02	IWD7 05/21/03 IWD7W(29-39)	IWD7 12/12/03 IWD7GW(30-40)	IWD7 05/05/04 IWD7GW	IWD7 10/26/04 IWD7-GW-102604	IWD7 05/11/05 IWD7-GW-051105	IWD7 11/02/05 IWD7-GW-110205FD	IWD7 05/17/06 IWD7-GW-051706	IWD7R 11/13/06 IWD7R-WG-111306	IWD7R 05/04/07 IWD7R-GW-050407
Detected PCBs																					
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	IWD7R 11/08/07 IWD7R-GW-110807	IWD7R 05/08/08 1WD7R-GW-050808	IWD7R 11/05/08 IWD7R-GW-110508	MWD6 09/11/01 MWD6-GW(5-15)	MWD6 09/11/01 MWD6-GW(5-15)D	MWD6 01/09/02 MWD6-GW	MWD6 11/13/02 MWD6-GW02	MWD6 05/21/03 MWD6W(5-15)	MWD6 12/12/03 MWD6GW(5-15)	MWD6 05/05/04 MWD6GW	MWD6 10/26/04 MWD6-GW-102604	MWD6 05/11/05 MWD6-GW-051105	MWD6 11/02/05 MWD6-GW-110205FD	MWD6 05/17/06 MWD6-GW-051706
Detected PCBs																					
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWD6R 11/16/06 MWD-6R-WG-111606	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808	MWD6R 11/05/08 MWD6R-GW-110508
Detected PCBs												
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

See Notes on last page.

Table 4-4 SHI 4-70a Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
MDEQ	Michigan Department of Environmental Quality
PCBs	Polychlorinated Biphenyls
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD10 01/22/02 DWD10-GW	DWD10 01/22/02 DWD10-GWDL	DWD10 11/12/02 DWD10-GW02	DWD10 11/12/02 DWD10-GWDL02	DWD10 05/19/03 DWD10W(141-151)	DWD10 12/11/03 DWD10GW(141-151)	DWD10 05/03/04 DWD10GW	DWD10 10/26/04 DWD10-GW-102604	DWD10 05/11/05 DWD10-GW-051105	DWD10 11/02/05 DWD10-GW-110205FD	DWD10 05/17/06 DWD10-GW-051706TB	DWD10 11/13/06 DWD10-WG-1113-06
Detected Volatile Organics																		
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	NA	100 U	NA	33 UJ	45 J	10 U	10 U	10 UJ	10 UJ	10 U	10 U	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	NA	100 U	NA	33 UJ	0.96 J	10 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	NA	10 U	NA	3.3 U	1.0 UJ	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	NA	10 UJ	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	0.21 J	1.0 U	1.0 U	0.14 J	0.21 J
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	NA	5.0 U	NA	1.7 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	NA	5.0 UJ	NA	1.7 U	0.50 UJ	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	NA	10 U	NA	1.6 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	NA	100 U	NA	33 U	10 UJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	NA	50 U	NA	17 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	NA	10 UJ	NA	3.3 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	NA	10 UJ	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	10 U	NA	3.3 U	1.0 UJ	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Detected Semivolatile Organics																		
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	NA	5.0 U	NA	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	NA	5.0 U	NA	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	NA	5.0 U	NA	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	NA	5.0 U	NA	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD10 05/02/07 DWD10-GW-05-02-07	DWD10 11/07/07 DWD10-GW-110707	DWD10 05/07/08 DWD10-GW-050708	DWD10 11/06/08 DWD10-GW-110608	DWD10 11/06/08 DWD10-GW-110608R2	DWD12 01/18/02 DWD12-GW	DWD12 11/12/02 DWD12-GW02	DWD12 05/20/03 DWD12W(115-125)	DWD12 10/31/03 DWD12-GW115-125	DWD12 12/17/03 DWD12GW(115-125)	DWD12 05/04/04 DWD12GW	DWD12 10/27/04 DWD12-GW-102704
Detected Volatile Organics																		
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 U	10 U	10 U	NA	10 UJ	10 UJ	10 U	NA	10 UJ	10 U	10 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	10 U	10 U	NA	10 UJ	10 UJ	10 U	NA	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.24 J	0.55 J	0.93 J	NA	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 UJ	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	18 B	1.0 UJ [1 UJ]	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	0.61 J	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	NA	10 U	10 U	10 U	NA	10 U	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.2	1.4 J	2.7 J	NA	5.0 U	5.0 UJ	0.37 J
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	0.60 J	1.0 U	NA	1.0 U	1.0 U	R	NA	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	R	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.38 J	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 UJ	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	1.0 U	1.0 U	1.0 UJ	NA	1.0 U	1.0 U	2.0 U
Detected Semivolatile Organics																		
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	DWD12 05/13/05 DWD12-GW-051305	DWD12 11/04/05 DWD12-GW-110405	DWD12 05/18/06 DWD12-GW-051806EB	DWD12 11/10/06 DWD12-WG-111006	DWD12 05/04/07 DWD12-GW-05-04-07	DWD12 11/09/07 DWD12-GW-110907	DWD12 05/08/08 DWD12-GW-050808	DWD12 11/06/08 DWD12-GW-110608	DWD12 11/06/08 DWD12-GW-110608R2	GWD8 09/14/01 GWD8-GW(63-73)-N	GWD8 01/10/02 GWD8-GW	GWD8 01/10/02 GWD8-GWDL
Detected Volatile Organics																		
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 UJ	10 UJ [10 UJ]	10 U	10 U [10 U]	10 U [10 U]	10 U [10 U]	1.2 J	NA	3,100	NA	140 J
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	6.4 U	NA	4.5
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	10 U [10 U]	10 U	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U	NA	16 U	NA	31 UJ
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	8.0 U	NA	3.1 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 UJ	NA	11 U	NA	3.1 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	10 U	NA	3.1 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 UJ [1 UJ]	1.0 U	NA	5.6 U	NA	3.1 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U [1 U]	0.27 J	1.0 U [1 U]	0.33 J [1 U]	1.0 U [1 U]	1.0 U	NA	5.2 U	NA	3.1 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	6.8 U	NA	3.1 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	9.6 U	NA	3.1 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	8.8 U	NA	1.6 UJ
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	6.0 U	NA	1.6 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	14 U	NA	3.1 UJ
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	4.8 U	NA	3.1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U [10 U]	10 U	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U	NA	9.2 U	NA	31 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	0.30 J	0.19 J	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	NA	5.2 U	NA	16 U
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	6.0 U	NA	3.1 UJ
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	9.2 U	NA	3.1 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	7.2 U	NA	3.1 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	5.6 U	NA	3.1 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	NA	6.0 U	NA	3.1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 U [2 U]	2.0 U	2.0 U [2 U]	2.0 U [2 U]	2.0 UJ [2 UJ]	2.0 U	NA	13 U	NA	3.1 UJ
Detected Semivolatile Organics																		
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	0.64 U	5.0 U	NA
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	1.3 U	5.0 U	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	0.80 U	5.0 U	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	2.7 U	5.0 U	NA

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
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Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD8 05/21/03 GWD8W(62-72)	GWD8 12/12/03 GWD8GW(63-73)	GWD8 05/05/04 GWD8GW	GWD8 10/26/04 GWD8-GW-102604	GWD8 05/11/05 GWD8-GW-051105	GWD8 11/02/05 GWD8-GW-110205FD	GWD8 05/17/06 GWD8-GW-051706	GWD8R 11/13/06 GWD8R-WG-111306	GWD8R 05/03/07 GWD8R-GW-05-03-07	GWD8R 11/08/07 GWD8R-GW-110807	GWD8R 05/09/08 GWD8R-GW-050908	GWD8R 11/05/08 GWD8R-GW-110508	GWD9 01/22/02 GWD9-GW
Detected Volatile Organics																			
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 U	10 U	10 UJ	10 U	10 U	10 U	16	10 U	10 U	10 U	10 U	NA
Benzene	5	5	200	**35,000**	1,750,000	68,000	0.56 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	0.41 J	10 UJ	10 U	10 U	10 U	1.3 J	10 U	10 U	10 U	10 U	NA
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.72 J	NA
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	NA
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U	0.48 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	2.2 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	NA
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	0.32 J	0.36 J	R	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	NA
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA
Detected Semivolatile Organics																			
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	2.9 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.2 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID:	MDEQ 2013 UPDATED	MDEQ 2013 UPDATED	MDEQ 2013 UPDATED	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD9 01/22/02	GWD9 11/12/02	GWD9 11/12/02	GWD9 05/19/03	GWD9 05/19/03	GWD9 12/11/03	GWD9 12/11/03	GWD9 05/03/04	GWD9 10/26/04	GWD9 05/11/05	GWD9 11/02/05	GWD9 05/17/06	GWD9 11/13/06
Date Collected:	Res DW	Non-Res DW	GSWI																
Sample Name:							GWD9-GWDL	GWD9-GW02	GWD9-GWDL02	GWD9W(72-82)	GWD9W(72-82)DL	GWD9GW(72-82)	GWD9GW(72-82)DL	GWD9GW	GWD9-GW-102604	GWD9-GW-051105	GWD9-GW-110205FD	GWD9-GW-051706TB	GWD9-WG-1113-06
Detected Volatile Organics																			
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	310 J	NA	3,300 UJ	NA	740 J	NA	1,800 B	10 U	10 UJ	10 U	10 U	10 U	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	67 U	NA	3,300 UJ	NA	150 UJ	NA	400 U	10 U	10 UJ	10 U	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	6.7 U	NA	330 U	NA	15 UJ	NA	40 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	6.7 UJ	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	0.24 J	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	6.7 U	NA	R	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	3.3 U	NA	R	NA	7.7 UJ	NA	20 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	3.3 U	NA	170 U	NA	7.7 UJ	NA	20 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	67 U	NA	R	NA	150 UJ	NA	400 U	10 U	10 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	33 UJ	NA	1,700 U	NA	77 UJ	NA	200 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	6.7 UJ	NA	330 U	NA	15 UJ	NA	40 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	6.7 U	NA	330 U	NA	15 UJ	NA	40 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Detected Semivolatile Organics																			
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	5.0 U	NA	5.0 UJ	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	5.0 U	NA	5.0 UJ	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	5.0 U	NA	5.0 UJ	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	5.0 U	NA	5.0 UJ	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD9 05/02/07 GWD9-GW-05-02-07	GWD9 11/08/07 GWD9-GW-110807	GWD9 05/07/08 GWD9-GW-050708	GWD9 11/06/08 GWD9-GW-110608	GWD9 11/06/08 GWD9-GW-110608R2	GWD11 01/29/02 GWD11-GW	GWD11 11/12/02 GWD11-GW02	GWD11 05/20/03 GWD11W(86-96)	GWD11 12/17/03 GWD11GW(86-96)	GWD11 05/04/04 GWD11GW	GWD11 10/27/04 GWD11-GW-102704	GWD11 05/12/05 GWD11-GW-051205	GWD11 11/04/05 GWD11-GW-110405
Detected Volatile Organics																			
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 U	10 U	10 U	NA	10 UJ	10 UJ	10 U	2.1 J	10 U	10 U	10 UJ	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	10 U	10 U	NA	10 UJ	10 UJ	10 U	10 U	10 U	10 U	10 UJ	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	0.52 J	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 UJ	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.28 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.36 J	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.64 J	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	NA	0.24 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	R	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U
Detected Semivolatile Organics																			
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	0.53 J	5.0 U	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD11 05/18/06 GWD11-GW-051806EB	IWD7 09/11/01 IWD7-GW(30-40)	IWD7 01/09/02 IWD7-GW	IWD7 01/09/02 IWD7-GWDL	IWD7 11/13/02 IWD7-GW02	IWD7 11/13/02 IWD7-GWDL02	IWD7 05/21/03 IWD7W(29-39)	IWD7 12/12/03 IWD7GW(30-40)	IWD7 05/05/04 IWD7GW	IWD7 05/05/04 IWD7GWDL	IWD7 10/26/04 IWD7-GW-102604	IWD7 10/26/04 IWD7-GW-102604DL	IWD7 05/11/05 IWD7-GW-051105	IWD7 11/02/05 IWD7-GW-110205FD	IWD7 05/17/06 IWD7-GW-051706
Detected Volatile Organics																					
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 UJ	10 U	NA	140 U	NA	14 UJ	38	10 U	NA	170	NA	240 J	21 J	10 U	1.9 J
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	NA	140 U	NA	14 UJ	10 U	10 U	NA	25 U	NA	57 UJ	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	0.25 J	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 UJ	NA	5.7 U	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	0.17 J	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	0.21 J	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	0.50 U	NA	7.1 U	NA	0.72 U	0.50 U	0.50 U	NA	1.2 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	0.50 U	NA	7.1 U	NA	0.72 U	0.50 U	0.50 U	NA	1.2 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	NA	14 U	NA	R	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	NA	140 U	NA	R	10 U	10 U	NA	R	NA	57 U	10 U	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	NA	71 U	NA	7.2 U	5.0 U	5.0 U	NA	12 U	NA	29 U	5.0 U	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	NA	14 UJ	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	5.7 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	1.0 U	NA	14 U	NA	1.4 U	1.0 U	1.0 U	NA	2.5 U	NA	11 U	2.0 U	2.0 U	2.0 U
Detected Semivolatile Organics																					
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	2.1 J	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	1.1 J	5.0 U	8.8	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	1.3 J

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	IWD7R 11/13/06 IWD7R-WG-111306	IWD7R 05/04/07 IWD7R-GW-050407	IWD7R 11/08/07 IWD7R-GW-110807	IWD7R 05/08/08 1WD7R-GW-050808	IWD7R 11/05/08 IWD7R-GW-110508	MWD6 09/11/01 MWD6-GW(5-15)	MWD6 01/09/02 MWD6-GW	MWD6 11/13/02 MWD6-GW02	MWD6 05/21/03 MWD6W(5-15)	MWD6 12/12/03 MWD6GW(5-15)	MWD6 12/12/03 MWD6GW(5-15)R2	MWD6 05/05/04 MWD6GW	MWD6 10/26/04 MWD6-GW-102604
Detected Volatile Organics																			
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	0.92 J	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	10 U	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	NA	10 U	10 UJ
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	0.49 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 UJ	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.53 J	1.0 U	NA	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	0.26 J	0.58 J	0.39 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.24 J
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	2.4	0.73	NA	0.50 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	NA	0.50 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	10 UJ	10 U	10 U	R	10 U	10 U	NA	R	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.6	0.41 J	NA	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.25 J	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	0.32 J	NA	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	0.99 J	2.0 U	2.0 U	2.0 UJ	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	2.0 U
Detected Semivolatile Organics																			
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	0.46 J	0.26 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 UJ	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 UJ	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 UJ	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 UJ	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWD6 05/11/05 MWD6-GW-051105	MWD6 11/02/05 MWD6-GW-110205FD	MWD6 05/17/06 MWD6-GW-051706	MWD6R 11/13/06 MWD6R-WG-111306	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808	MWD6R 11/05/08 MWD6R-GW-110508
Detected Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	5.6 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	1.1 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.8	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	1.0 U
1,4-Dichlorobenzene	75	75	17	**74,000**	73,800	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	7	7	130	**1,300**	2,250,000	97,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	7.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	3.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	2.1	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	2.0 U
Detected Semivolatile Organics														
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	5.0 U	0.33 J	5.0 U	0.46 J	1.1 J
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

See Notes on last page.

Table 4-4 SHI 4-70A Groundwater VOC-SVOC
RACER - Pontiac North Campus

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
R	Rejected data
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-10 06/21/01 MW-10-GW(15-20)06210	MW-10 01/07/02 MW-10-GW	MW-19 08/28/01 MW-19-GW(24-29)-N	MW-19 01/07/02 MW-19-GW	MW-29-99 06/22/01 MW-29-99-GW(15-20)06	MW-29-99 01/10/02 MW29-99-GW	MW-30-99 06/25/01 MW30-99(17.4-22.4)06	MW-30-99 01/07/02 MW30-99-GW	MW-31-99 06/25/01 MW31-99(21.5-26.5)06	MW-31-99 01/07/02 MW31-99-GW
Inorganics																
Antimony	6	6	130	- -	- -	- -	25.0 U [25 U]	25.0 U	2.2 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	19.7 [17.7]	18.8	23.7	26.4	10.0 U	10.0 U	23.7	23.9	5.0 J	6.4 J
Barium	2,000	2,000	670	- -	- -	- -	87.5 [83.3]	66.0	98.8	115	72.2	73.0	191	223	511	418
Beryllium	4	4	6.7	- -	- -	- -	1.0 U [1 U]	1.0 U	0.54 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U [5 U]	0.30 J	1.1 J	0.58 J	5.0 U	5.0 U	5.0 U	0.40 J	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U [10 U]	10.0 U	1.4 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	2.6 J [2.1 J]	1.7 J	3.2 J	2.5 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U [5 U]	5.0 U	4.2 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	- -	- -	- -	- -	- -	- -	10.0 U [10 U]	6.1 J	3.8 J	2.4 J	10.0 U	2.3 J	10.0 U	10.0 U	6.0 J	6.9 J
Lead	4	4	14	- -	- -	- -	3.0 U [3 U]	3.0 U	2.5 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	456 [435]	481	246	409	329	307 J	916	940	174	113
Mercury	2	2	0.0013	**56**	56	- -	0.10 J [0.2 U]	0.20 U	0.11 J	0.20 U	0.099 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	5.7 J [5.2 J]	4.0 J	11.0 J	13.4 J	20.0 U	2.6 J	20.0 U	20.0 U	2.6 J	3.3 J
Selenium	50	50	5	- -	- -	- -	5.0 U [5 U]	5.0 U	4.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U [5 U]	5.0 U	1.5 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	10.0 U [10 U]	0.018 J	5.0 U	1.0 U	10.0 U	1.0 U	10.2	1.0 U	5.7 J	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U [10 U]	10.0 U	0.82 U	10.0 U	10.0 U	10.0 U	10.0 U	1.0 J	2.2 J	3.1 J
Zinc	2,400	5,000	170	- -	- -	- -	23.2 [14.8 J]	20.0 U	12.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U [25 U]	25.0 U	7.9 J	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic (dissolved)	10	10	10	- -	- -	- -	19.0 [18.7]	19.2	22.3	26.9	10.0 U	10.0 U	23.3	24.5	4.0 J	5.3 J
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	84.4 [85.4]	62.9	102	116	72.4	75.9	196	225	540	387
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	1.0 U [1 U]	1.0 U	0.75 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	5.0 U [5 U]	5.0 U	0.28 U	0.69 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U [10 U]	10.0 U	1.4 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt (dissolved)	40	100	100	- -	- -	- -	2.0 J [2.2 J]	1.6 J	1.3 U	2.6 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	5.0 U [5 U]	5.0 U	4.2 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Lead (dissolved)	4	4	14	- -	- -	- -	3.0 U [3 U]	3.0 U	2.5 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese (dissolved)	50	50	1,300	- -	- -	- -	435 [417]	464	278	463	340	315 J	952	946	184	105
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U [0.2 U]	0.20 U	0.13 J	0.20 U	0.083 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel (dissolved)	100	100	73	- -	- -	- -	5.2 J [5 J]	3.5 J	8.5 J	13.5 J	20.0 U	20.0 U	20.0 U	20.0 U	2.4 J	3.0 J
Selenium (dissolved)	50	50	5	- -	- -	- -	5.0 U [5 U]	5.0 U	4.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver (dissolved)	34	98	0.2	- -	- -	- -	5.0 U [5 U]	5.0 U	1.5 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Thallium (dissolved)	2	2	3.7	- -	- -	- -	5.3 J [10 U]	0.043 J	5.0 U	1.0 U	10.0 U	1.0 U	9.1 J	1.0 U	6.4 J	1.0 U
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U [10 U]	10.0 U	0.82 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	2.1 J	2.1 J
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U [20 U]	20.0 U	12.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-33-99 06/25/01 MW33-99(22.9-27.9)	MW-33-99 01/07/02 MW33-99-GW	MW-34-99 08/28/01 MW-34-99-GW(25-30)-N	MW-34-99 01/07/02 MW34-99-GW	MW-39-99 08/28/01 MW-39-99-GW(25-30)-N	MW-39-99 01/10/02 MW39-99-GW	MW-40-99 01/10/02 MW40-99-GW	MW-40-99 11/12/02 MW40-99-GW02	MW-40-99 05/19/03 MW4099W(11-16)	MW-40-99 12/11/03 MW4099GW(11-16)
Inorganics																
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U	7.4 J	25.0 U [25 U]	6.7 J	25.0 U	25.0 U	25.0 U	25.0 UJ [25 UJ]	25.0 U
Arsenic	10	10	10	- -	- -	- -	10.0 U	10.0 U	5.0 J	6.6 J [6 J]	3.9 U	10.0 U	10.0 U	3.5 J	5.9 J [4 J]	3.4 J
Barium	2,000	2,000	670	- -	- -	- -	116	147	716	751 [718]	132	80.8	163	414	182 J [182 J]	122
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	1.0 U	0.54 U	1.0 U [1 U]	0.54 U	1.0 U	1.0 U	1.0 U	1.0 UJ [1 UJ]	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	0.28 U	0.30 J [5 U]	0.28 U	5.0 U	5.0 U	0.32 J	5.0 UJ [5 UJ]	0.50 J
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	1.4 U	10.0 U [10 U]	1.4 U	2.7 J	10.0 U	3.8 J	10.0 UJ [10 UJ]	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	1.3 U	20.0 U [20 U]	1.3 U	2.1 J	20.0 U	6.6 J	0.77 J [0.9 J]	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	4.2 U	5.0 U [5 U]	4.7 J	5.0 U	5.0 U	5.5 J	5.0 UJ [5 UJ]	5.0 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyanide (total)	- -	- -	- -	- -	- -	- -	10.0 U	6.8 J	6.3 J	6.3 J [6.1 J]	8.9 J	7.8 J	2.8 J	9.1 J	5.7 J [5.7 J]	4.9 J
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	2.5 U	3.0 U [3 U]	6.6	19.9	3.0 U	1.8 J	3.0 UJ [3 UJ]	3.0 U
Manganese	50	50	1,300	- -	- -	- -	371	467	607	591 [560]	51.5	75.6 J	301 J	150	1,240 J [1,190 J]	727
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.069 U	0.20 U [0.2 U]	0.069 U	0.20 U	0.20 U	0.20 U	0.20 UJ [0.2 UJ]	0.20 U
Nickel	100	100	73	- -	- -	- -	4.6 J	3.9 J	2.2 U	20.0 U [20 U]	3.0 J	9.5 J	20.0 U	11.1 J	20.0 UJ [20 UJ]	20.0 U
Selenium	50	50	5	- -	- -	- -	4.9 J	5.0 U	4.5 U	5.0 U [5 U]	4.5 U	5.0 U	5.0 U	5.0 U	5.0 UJ [5 UJ]	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	1.5 U	5.0 U [5 U]	1.5 U	5.0 U	5.0 U	5.0 U	5.0 UJ [5 UJ]	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	10.0 U	1.0 U	5.0 U	1.0 U [1 U]	5.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ [1 UJ]	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	0.82 U	10.0 U [10 U]	0.82 U	10.0 U	10.0 U	4.7 J	10.0 UJ [10 UJ]	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	18.5 J	20.0 U	12.0 U	20.0 U [70.3]	12.0 U	20.0 U	20.0 U	20.0 U	20.0 UJ [20 UJ]	20.0 U
Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U	25.0 U	7.3 J	25.0 U [25 U]	5.8 J	25.0 U	25.0 U	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	10.0 U	10.0 U	3.9 U	5.2 J [6.7 J]	3.9 U	4.2 J	10.0 U	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	118	142	730	719 [724]	95.9	60.6	152	NA	NA	NA
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	1.0 U	1.0 U	0.54 U	1.0 U [1 U]	0.54 U	1.0 U	1.0 U	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	0.28 U	0.31 J [0.37 J]	0.28 U	5.0 U	5.0 U	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U	10.0 U	1.4 U	10.0 U [10 U]	1.4 U	1.8 J	8.5 J	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	20.0 U	20.0 U	1.3 U	20.0 U [20 U]	1.3 U	2.0 J	1.3 J	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	4.2 U	5.0 U [5 U]	4.2 U	5.0 U	5.0 U	NA	NA	NA
Lead (dissolved)	4	4	14	- -	- -	- -	3.0 U	3.0 U	2.5 U	3.0 U [3 U]	2.5 U	3.0 U	3.0 U	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	381	457	610	582 [565]	47.2	79.1 J	280 J	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.11 J	0.20 U [0.2 U]	0.069 U	0.20 U	0.20 U	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	3.6 J	4.3 J	2.2 U	20.0 U [20 U]	2.9 J	9.2 J	3.2 J	NA	NA	NA
Selenium (dissolved)	50	50	5	- -	- -	- -	5.0 U	5.0 U	4.5 U	5.0 U [5 U]	4.5 U	5.0 U	5.0 U	NA	NA	NA
Silver (dissolved)	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	1.5 U	5.0 U [5 U]	1.5 U	5.0 U	5.0 U	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	6.6 J	1.0 U	5.0 U	1.0 U [1 U]	5.0 U	1.0 U	1.0 U	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	0.82 U	10.0 U [10 U]	0.82 U	10.0 U	10.0 U	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U	15.6 J	12.0 U	20.0 U [20 U]	12.0 U	20.0 U	20.9	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 05/03/04 MW4099GW (050304)	MW-40-99 05/17/04 MW4099GW051704	MW-40-99 10/26/04 MW40-99-GW-102604	MW-40-99 05/11/05 MW-40-99-GW-051105	MW-40-99 11/02/05 MW40-99-GW-110205FD	MW-40-99 05/17/06 MW-40-99-GW-051706TB	MW-40-99 11/13/06 MW-40-99-WG-1113-06	MW-40-99 05/02/07 MW-40-99-GW-05-02-07
Inorganics														
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	2.6 J	3.0 J	10.0 U	3.0 J	10.0 U	1.5 J	1.4 J	1.3 J
Barium	2,000	2,000	670	- -	- -	- -	98.1	95.6	145	126	134	120	137	120
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	1.9 J	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	1.2 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	0.010 U	0.010 U	0.010 U	0.010 U	0.0087 J	0.010 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	4.4 J	NA	NA	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	651	589	255	351	221 J	311 J	240 J	287
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	2.4 J	20.0 U	20.0 U	20.0 U
Selenium	50	50	5	- -	- -	- -	5.0 U	4.0 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	135,000	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U	0.58 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Inorganics-Filtered														
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	25.0 U	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	88.6	NA	NA	NA	NA	NA	NA
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	1.0 U	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA
Lead (dissolved)	4	4	14	- -	- -	- -	NA	3.0 U	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	579	NA	NA	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	0.20 U	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	0.25 J	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 11/07/07 MW40-99-GW-110707	MW-40-99 05/07/08 MW-40-99-GW-050708	MW-40-99 11/06/08 MW40-99-GW-110608	MW-42-99 06/21/01 MW-42-99-GW(18-23)	MW-42-99 01/07/02 MW42-99-GW	MWD6R 11/13/06 MWD6R-WG-111306	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808
Inorganics															
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	3.7	3.0	1.4 J	10.0 U	10.0 U	2.8 U	1.4 J	2.2	1.3 J
Barium	2,000	2,000	670	- -	- -	- -	168	303 J	153 J	139	202	145	62.7	69.9 J	137 J
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	3.2 J	20.0 U	1.8 J	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	0.010 U	0.0077 B	0.0084 J	NA	NA	NA	NA	NA	NA
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	8.8 J	11.1	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	210	112 J	435 J	116	179	126 J	78.4	38.5 J	117 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	3.5 J	20.0 U	6.3 J	4.8 J	20.0 U	20.0 U	20.0 U	20.0 U
Selenium	50	50	5	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	10.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	2.0 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	25.0 U	25.0 U	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	4.1 J	10.0 U	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	127	211	NA	NA	NA	NA
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	NA	NA	1.0 U	1.0 U	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	5.0 U	5.0 U	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	10.0 U	10.0 U	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	2.0 J	1.7 J	NA	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	5.0 U	5.0 U	NA	NA	NA	NA
Lead (dissolved)	4	4	14	- -	- -	- -	NA	NA	NA	3.0 U	3.0 U	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	108	182	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	0.20 U	0.12 J	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	5.8 J	5.0 J	NA	NA	NA	NA
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	NA	NA	5.0 U	5.0 U	NA	NA	NA	NA
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	NA	NA	5.0 U	5.0 U	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	10.0 U	1.0 U	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	10.0 U	10.0 U	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	20.0 U	20.0 U	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWD6R 11/05/08 MWD6R-GW-110508	MWW1-02 01/17/02 MWW1-02-GW-N	MWW1-02 11/08/02 MWW102GW110802	MWW1-02 05/19/03 MWW102W(1-11)	MWW1-02 12/10/03 MWW102GW(1-11)	MWW1-02 05/03/04 MWW102GW (050304)	MWW1-02 05/17/04 MWW102GW051704	MWW1-02 10/26/04 MWW1-02-GW-102604	MWW1-02 05/11/05 MWW1-02-GW-051105
Inorganics															
Antimony	6	6	130	- -	- -	- -	25.0 U	2.2 U	25.0 U	25.0 UJ	25.0 U [25 U]	25.0 U [25 U]	25.0 U	25.0 U [25 U]	25.0 U
Arsenic	10	10	10	- -	- -	- -	1.5 J	10.9	5.3 J	2.1 J	10.0 U [10 U]	10.0 U [10 U]	10.0 U	10.0 U [10 U]	10.0 U
Barium	2,000	2,000	670	- -	- -	- -	185 J	155	137	178 J	200 [186]	216 [216]	212	171 [163]	147
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	0.54 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	0.28 U	5.0 U	5.0 UJ	0.49 J [0.46 J]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	1.4 U	10.0 U	10.0 UJ	10.0 U [10 U]	10.0 U [10 U]	10.0 U	10.0 U [10 U]	10.0 U
Cobalt	40	100	100	- -	- -	- -	20.0 U	1.3 U	20.0 U	20.0 UJ	20.0 U [20 U]	20.0 U [20 U]	20.0 U	20.0 U [20 U]	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	4.2 U	5.0 U	5.0 UJ	5.0 U [5 U]	2.5 J [5 U]	5.0 U	5.0 U [5 U]	5.0 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.010 U [0.01 U]	0.010 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	2.7 J	10.0 U	2.3 J	10.0 U [9.2 J]	10.0 U [3.1 J]	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U	2.5 U	3.0 U	3.0 UJ	3.0 U [3 U]	3.0 U [3 U]	3.0 U	3.0 U [3 U]	3.0 U
Manganese	50	50	1,300	- -	- -	- -	194 J	539 J	448 J	464 J	532 [486]	543 [548]	638	410 [419]	447
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.12 J	0.20 U	0.20 UJ	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U	0.20 U [0.2 U]	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	2.2 U	20.0 U	20.0 UJ	20.0 U [20 U]	20.0 U [20 U]	3.3 J	20.0 U [20 U]	20.0 U
Selenium	50	50	5	- -	- -	- -	5.0 U	4.5 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	1.5 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U	0.018 U	1.0 U	1.0 UJ	1.0 U [0.045 J]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	0.82 U	10.0 U	10.0 UJ	10.0 U [10 U]	10.0 U [10 U]	10.0 U	10.0 U [10 U]	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	12.0 U	20.0 U	20.0 UJ	20.0 U [20 U]	20.0 U [15.7 J]	20.0 U	20.0 U [20 U]	20.0 U
Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	2.2 U	NA	NA	NA	NA	25.0 U	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	12.0	NA	NA	NA	NA	10.0 U	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	163	NA	NA	NA	NA	209	NA	NA
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	0.54 U	NA	NA	NA	NA	1.0 U	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	0.28 U	NA	NA	NA	NA	5.0 U	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	1.4 U	NA	NA	NA	NA	10.0 U	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	1.3 U	NA	NA	NA	NA	20.0 U	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	4.2 U	NA	NA	NA	NA	5.0 U	NA	NA
Lead (dissolved)	4	4	14	- -	- -	- -	NA	2.5 U	NA	NA	NA	NA	3.0 U	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	558 J	NA	NA	NA	NA	647	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	0.069 U	NA	NA	NA	NA	0.20 U	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	2.2 U	NA	NA	NA	NA	3.3 J	NA	NA
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	4.5 U	NA	NA	NA	NA	5.0 U	NA	NA
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	1.5 U	NA	NA	NA	NA	5.0 U	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	0.018 U	NA	NA	NA	NA	1.0 U	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	0.82 U	NA	NA	NA	NA	10.0 U	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	12.0 U	NA	NA	NA	NA	20.0 U	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-02 11/02/05 MWW1-02-GW-110205FD	MWW1-02 05/17/06 MWW1-02-GW-051706	MWW1-02 11/13/06 MWW1-02-WG-111306	MWW1-02 05/03/07 MWW1-02-GW-05-03-07	MWW1-02 11/07/07 MWW1-02-GW-110707	MWW1-02 05/07/08 MWW1-02-GW-050708	MWW1-02 11/06/08 MWW1-02-GW-110608	MWW1-02 08/21/13 MWW1-02_08212013	MWW1-03 01/17/02 MWW1-03-GW-N
Inorganics															
Antimony	6	6	130	- -	- -	- -	25.0 U [25 U]	4.5 J [25 U]	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	0.55 J	2.2 U
Arsenic	10	10	10	- -	- -	- -	10.0 U [10 U]	1.0 J [0.97 J]	2.0 U	0.51 J	2.0 U	0.81 J	1.6 J	12 B	4.7 J
Barium	2,000	2,000	670	- -	- -	- -	147 [147]	116 [123]	126	90.7	99.8	66.4 J	75.8 J	170 B	188
Beryllium	4	4	6.7	- -	- -	- -	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.58 JB	0.54 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.44 J	0.28 U
Chromium	100	100	11	- -	- -	- -	10.0 U [5.8 J]	10.0 U [10 U]	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	0.71 JB	1.4 U
Cobalt	40	100	100	- -	- -	- -	20.0 U [20 U]	20.0 U [20 U]	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	1.5	1.3 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	2.2 B	4.2 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	0.010 U [0.01 U]	0.010 U [0.01 U]	0.0073 J	0.010 U	0.010 U	0.010 U	0.010 U	NA	NA
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	3.4 J
Lead	4	4	14	- -	- -	- -	3.0 U [3 U]	3.0 U [3 U]	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	0.94 JB	2.5 U
Manganese	50	50	1,300	- -	- -	- -	409 J [414 J]	376 J [400 J]	421 J	262	374	187 J	1,230 J	1,300 B	427 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.069 U
Nickel	100	100	73	- -	- -	- -	20.0 U [4.3 J]	20.0 U [20 U]	32.4	20.0 U	20.0 U	20.0 U	20.0 U	3.1 B	2.9 J
Selenium	50	50	5	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3 J	4.5 U
Silver	34	98	0.2	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.058 JB	1.5 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.018 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U [10 U]	10.0 U [10 U]	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	1.1 JB	0.82 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U [20 U]	20.0 U [20 U]	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	6.8 JB	12.0 U
Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.31 J	2.2 U
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	12 B	4.3 J
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	180 B	191
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.31 JB	0.54 U
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.026 J	0.28 U
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.46 JB	1.4 U
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.1	1.3 U
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.7 JB	4.2 U
Lead (dissolved)	4	4	14	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.44 JB	2.5 U
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1,300 B	433 J
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	NA	NA	0.20 U	0.069 U
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	2.8 B	3.6 J
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.61 J	4.5 U
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.0090 JB	1.5 U
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	1.0 U	0.018 U
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	0.75 JB	0.82 U
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	4.6 JB	12.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-03 11/08/02 MWW103GW110802	MWW1-03 05/19/03 MWW103W(1-11)	MWW1-03 12/10/03 MWW103GW(1-11)	MWW1-03 05/03/04 MWW103GW (050304)	MWW1-03 05/17/04 MWW103GW051704	MWW1-03 10/26/04 MWW1-03-GW-102604	MWW1-03 05/11/05 MWW1-03-GW-051105	MWW1-03 11/02/05 MWW1-03-GW-110205FD	MWW1-03 05/17/06 MWW1-03-GW-051706TB
Inorganics															
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 UJ	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U [25 U]	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	6.1 J	10.0 UJ	10.0 U	10.0 U	10.0 U	10.0 U	3.2 J [3.2 J]	10.0 U	2.0
Barium	2,000	2,000	670	- -	- -	- -	166	139 J	245	130	161	105	130 [127]	134	162
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 UJ	0.65 J	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 UJ	10.0 U	10.0 U	7.2 J	10.0 U	10.0 U [10 U]	4.6 J	3.3 J
Cobalt	40	100	100	- -	- -	- -	1.1 J	20.0 UJ	20.0 U	20.0 U	2.1 J	20.0 U	20.0 U [20 U]	1.6 J	1.8 J
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	4.1 J	3.2 J
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	0.010 U	0.010 U [0.01 U]	0.010 U	0.010 U
Cyanide (total)	- -	- -	- -	- -	- -	- -	10.0 U	10.0 UJ	10.0 U	10.0 U	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 UJ	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U [3 U]	18.1	4.4
Manganese	50	50	1,300	- -	- -	- -	429 J	494 J	1,320	873	740	568	725 [717]	675 J	737 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U [0.2 U]	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 UJ	5.3 J	20.0 U	8.5 J	20.0 U	2.8 J [3 J]	9.3 J	4.6 J
Selenium	50	50	5	- -	- -	- -	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U
Silver	34	98	0.2	- -	- -	- -	5.0 U	5.0 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U [5 U]	5.0 U	5.0 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 UJ	10.0 U	10.0 U	1.4 J	10.0 U	10.0 U [10 U]	3.2 J	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 UJ	20.0 U	20.0 U	25.9	20.0 U	20.0 U [20 U]	35.2	20.5
Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	25.0 U	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	10.0 U	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	153	NA	NA	NA	NA
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	4.5 J	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	2.3 J	NA	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Lead (dissolved)	4	4	14	- -	- -	- -	NA	NA	NA	NA	3.0 U	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	739	NA	NA	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	0.20 U	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	5.6 J	NA	NA	NA	NA
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	NA	NA	NA	5.0 U	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	1.6 J	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	20.0 U	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-03 11/13/06 MWW1-03-WG-111306	MWW1-03 05/04/07 MWW1-03-GW-050407	MWW1-03 11/07/07 MWW1-03-GW-110707	MWW1-03 05/07/08 MWW1-03-GW-050708	MWW1-03 11/06/08 MWW1-03-GW-110608	MWW1-03 08/21/13 MWW1-03_08212013
Inorganics												
Antimony	6	6	130	- -	- -	- -	25.0 U [25 U]	25.0 U [25 U]	10.2 J [2.7 J]	25.0 U [25 U]	25.0 U [25 U]	0.15 J
Arsenic	10	10	10	- -	- -	- -	2.0 [1.7 J]	1.0 J [1.4 J]	7.3 [5.4]	1.5 J [1.5 J]	4.0 [4.3]	12 B
Barium	2,000	2,000	670	- -	- -	- -	219 [214]	335 [339]	96.9 J [95 J]	240 J [249 J]	96.1 J [93.9 J]	180 B
Beryllium	4	4	6.7	- -	- -	- -	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	0.24 JB
Cadmium	5	5	2.5	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	1.2 J [5 U]	5.0 U [5 U]	0.50 U
Chromium	100	100	11	- -	- -	- -	10.0 U [10 U]	10.0 U [10 U]	10.0 U [10 U]	4.5 J [10 U]	10.0 U [10 U]	0.45 JB
Cobalt	40	100	100	- -	- -	- -	20.0 U [20 U]	20.0 U [20 U]	20.0 U [20 U]	4.1 J [20 U]	20.0 U [20 U]	1.2
Copper	1,000	1,000	13	- -	- -	- -	5.0 U [5 U]	5.0 U [2.1 J]	5.0 U [5 U]	5.6 [5 U]	5.0 U [5 U]	1.6 JB
Cyanide (total)	- -	- -	- -	- -	- -	- -	0.010 [0.0058 J]	0.0049 J [0.0055 J]	0.010 U [0.01 U]	0.0053 B [0.005 B]	0.010 U [0.01 U]	NA
Cyanide (total)	- -	- -	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U [3 U]	3.0 U [3 U]	2.9 J [3 U]	3.0 U [3 U]	3.0 U [3 U]	0.30 JB
Manganese	50	50	1,300	- -	- -	- -	741 J [724 J]	1,130 [1,130]	425 J [434 J]	324 J [296 J]	1,050 J [1,030 J]	990 B
Mercury	2	2	0.0013	**56**	56	- -	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U [20 U]	3.3 J [20 U]	20.0 U [3.7 J]	6.5 J [20 U]	5.5 J [5.5 J]	6.9 B
Selenium	50	50	5	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	0.39 J
Silver	34	98	0.2	- -	- -	- -	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	4.2 J [5 U]	5.0 U [5 U]	0.20 U
Sodium	230,000	350,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U [10 U]	10.0 U [10 U]	3.3 J [2.5 J]	4.0 J [10 U]	10.0 U [10 U]	0.77 JB
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U [20 U]	20.0 U [20 U]	5.0 J [20 U]	8.1 J [7.7 J]	20.0 U [20 U]	7.9 JB
Inorganics-Filtered												
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	0.15 J
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	11 B
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	170 B
Beryllium (dissolved)	4	4	6.7	- -	- -	- -	NA	NA	NA	NA	NA	0.20 JB
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	0.50 U
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	0.28 JB
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	1.1
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	NA	NA	1.4 JB
Lead (dissolved)	4	4	14	- -	- -	- -	NA	NA	NA	NA	NA	0.42 JB
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	930 B
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA	NA	NA	0.20 U
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	4.7 B
Selenium (dissolved)	50	50	5	- -	- -	- -	NA	NA	NA	NA	NA	0.68 J
Silver (dissolved)	34	98	0.2	- -	- -	- -	NA	NA	NA	NA	NA	0.20 U
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	1.0 U
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	0.71 JB
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	10 U

See Notes on last page.

Table 4-21 W-01 Groundwater Inorganics
RACER - Pontiac North Camput

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MW-10 06/21/01 MW-10-GW(15-20)	MW-10 01/07/02 MW10-GW-010702	MW-19 08/28/01 MW-19GWD(24-29)	MW-19 08/28/01 MW-19-GWT(24-29)	MW-19 01/07/02 MW-19-GW-010702	MW-29-99 06/22/01 MW-29-99-GW(15-20)	MW-30-99 06/25/01 MW30-99-GW(17.4-22.4	MW-30-99 01/07/02 MW30-99-GW-010702	MW-31-99 06/25/01 MW31-99-GW(21.5-26.5	MW-31-99 01/07/02 MW31-99-GW-010702
Miscellaneous																	
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans																	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.5 J [3.1 J]	7 J	NA	3.2 U	7.1 U	2.2 U	4.2 U	6.9 J	3.5 U	5.9 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	5.8 J [6.6 J]	7.8 J	NA	3.8 U	8.8 U	2.9 U	5.1 U	7.5 U	4.2 U	7.4 U
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	3.8 U [3.3 U]	4.4 U	NA	2.2 U	6 U	1.9 U	3 U	5.2 U	2.5 U	4.7 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	2 U [1.7 U]	2.9 U	NA	1.6 U	6.9 U	1 U	3.2 U	3.3 J	1.4 U	3.7 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	2.5 U [2.2 U]	4.6 J	NA	2.1 U	8.6 U	1.2 U	3.8 U	4 J	1.7 U	4.6 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2.2 U [1.8 U]	3.1 U	NA	1.6 U	4.5 U	1 U	2 U	0.26 J	1.7 U	2.9 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.5 U [1.7 J]	2.4	NA	1.5 J	3.8 U	0.7 U	2.5 U	2.3 U	1 U	2.3 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2.2 U [1.8 U]	2.9 J	NA	1.6 U	4.6 U	1 U	2.1 U	3.2 U	1.7 U	3 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U [1.2 U]	2 U	NA	0.9 U	3.8 U	0.7 U	2.6 U	3.5 J	1.1 U	2.3 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2 U [1.9 J]	2.8 J	NA	1.5 U	4.5 U	0.9 U	2.1 U	6.6 J	1.7 U	2.9 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.7 U [1.5 U]	2.4 U	NA	1.1 U	4.5 U	0.8 U	3.3 U	5.9 J	1.3 U	2.8 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	1.9 U [1.8 U]	2.5 U	NA	1.1 U	3.1 U	1 U	2.2 U	3.6 J	1.8 U	2 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.3 U [1.1 J]	2 U	NA	1.2 U	2.6 U	0.7 U	1.8 U	5.2 J	1.4 U	1.6 U
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.5 U [1.3 U]	1.9 U	NA	0.9 U	3.7 U	0.7 U	2.6 U	2.3 U	1.1 U	2.2 U
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.3 U [1.3 U]	2 U	NA	1.1 U	2.6 UJ	0.7 U	1.7 U	3.4 J	1.3 U	1.5 U
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	1.9 U [1.8 U]	2.3 U	NA	1.3 U	3 U	0.9 U	1.8 U	2.1 U	1.5 U	1.9 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U [1.2 U]	1.9 U	NA	0.7 U	2.6 U	0.7 U	1.3 U	1.8 U	1.1 U	1.7 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	2.2 U [1.9 U]	4.6 J	NA	1.8 U	7.7 U	1.1 U	3.5 U	7.3 J	1.6 U	4.1 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	3.8 U [3.3 U]	4.4 U	NA	2.2 U	6 U	1.9 U	3 U	5.2 U	2.5 U	4.7 U
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.5 U [1.7 J]	4.8	NA	1.5 J	3.9 U	0.7 U	2.7 U	9.4 J	1.1 U	2.4 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.1 U [1.9]	8 J	NA	4.3	4.6 U	1 U	2.1 U	7.3 J	1.7 U	2.9 U
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.3 U [1.1]	3.4 J	NA	1.2 U	2.6 U	0.7 U	1.8 U	8.6 J	1.3 U	1.6 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.9 U [1.8 U]	2.5 U	NA	1.1 U	3.1 U	1 U	2.2 U	3.6 J	1.8 U	2 U
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	3 J [1.2 U]	4.2 J	NA	0.7 U	6.3	1.3 J	1.3 U	1.8 U	4.2 J	1.8 J
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.9 U [1.8 U]	2.3 U	NA	1.3 U	3 U	0.9 U	1.8 U	2.1 U	1.5 U	1.9 U
Dioxins/Furans-Filtered																	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	7.5 J	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	1.9	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	2.1 U	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	2.5 J	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MW-33-99 06/25/01 MW33-99GW(22.9-27.9	MW-33-99 01/07/02 MW33-99-GW-010702	MW-34-99 08/28/01 MW-34-99-GWD(24-29)	MW-34-99 08/28/01 MW-34-99-GWT(25-30)	MW-34-99 01/07/02 MW34-99-GW-010702	MW-39-99 08/28/01 MW-39-99-GWD(25-30)	MW-39-99 08/28/01 MW-39-99-GWT(25-30)	MW-40-99 11/12/02 MW4099GW	MW-40-99 05/19/03 MW4099W(11-16)	MW-40-99 12/11/03 MW4099GW(11-16)
Miscellaneous																	
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans																	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	4.9 U	1.9 U	NA	3 U	5.5 J [12.3 J]	NA	4.1 U	50 U	6.9 UJ [5.9 UJ]	5.9 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	5.9 U	2.3 U	NA	3.7 U	10.9 J [16.5 J]	NA	5 U	50 U	7.3 UJ [6.7 UJ]	5.6 U
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	3.5 U	1.6 U	NA	4.3 J	6.4 J [7.7 J]	NA	19 J	25 U	4.7 UJ [3.9 UJ]	4.0 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	1.8 U	1.4 U	NA	1.2 U	9.2 J [13.6 J]	NA	1.7 U	25 U	5.0 UJ [4.5 UJ]	9.1 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	2.2 U	1.8 U	NA	1.6 U	4.6 U [6.9 J]	NA	2.2 U	25 U	4.2 UJ [3.3 UJ]	11 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2.2 U	1 U	NA	1.3 U	2.3 J [8.8 J]	NA	2.2 J	25 U	4.3 UJ [4.3 UJ]	3.6 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	0.9 U	NA	1.5 J	2.2 U [1.9 U]	NA	1.1 U	25 U	4.8 UJ [4.5 UJ]	3.0 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2.3 U	1.1 U	NA	1.4 U	4.6 J [8.5 J]	NA	5.5 J	25 U	4.5 UJ [4.5 UJ]	3.9 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	0.9 U	NA	0.8 U	5 J [11.2 J]	NA	1.2 U	25 U	4.7 UJ [4.4 UJ]	2.9 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	2.2 U	1 U	NA	1.3 U	5.6 J [10.4 J]	NA	4.4 J	25 U	4.2 UJ [4.1 UJ]	3.6 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.8 U	1.1 U	NA	1 U	7.1 J [13.5 J]	NA	1.5 U	25 U	5.4 UJ [5 UJ]	3.6 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	0.8 U	NA	1 U	5.6 J [14.9 J]	NA	1.6 J	10 U	4.6 UJ [3.6 UJ]	5.5 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.9 U	0.6 U	NA	1.2 U	5.8 J [19.3 J]	NA	3.8 J	10 U	3.0 UJ [3 UJ]	3.4 U
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	0.9 U	NA	0.8 U	4.8 J [6.9 J]	NA	1.2 U	25 U	4.9 UJ [4.6 UJ]	3.3 U
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.8 U	0.6 U	NA	1.1 U	6.6 J [15.7 J]	NA	10.4 J	10 U	3.0 UJ [3 UJ]	3.3 U
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	2.1 U	0.8 U	NA	1 U	4.1 J [6 J]	NA	1.5 U	10 U	2.6 UJ [2.1 UJ]	3.1 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	1.6 U	0.7 U	NA	0.6 U	1.6 U [7.3 J]	NA	5.3 U	10 U	1.8 UJ [1.6 UJ]	2.1 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	2 U	1.6 U	NA	12.5	24.1 J [29.5 J]	NA	33.4	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	3.5 U	1.6 U	NA	4.3	10.7 J [11 J]	NA	40.3 J	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.5 U	1.1	NA	9.6 J	31.1 J [50.9]	NA	52.7 J	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.2 U	1.1 U	NA	10.4 J	17 J [31.1 J]	NA	49.2 J	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.8 U	0.6 U	NA	6.4 J	12.4 J [35 J]	NA	126 J	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	0.8 U	NA	1 U	5.6 [14.9]	NA	19.7 J	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	3.2 J	1.3 J	NA	7.5 J	1.6 U [22.9 J]	NA	161 J	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.1 U	0.97 J	NA	1 U	4.1 [6 J]	NA	14.3 J	NA	NA	NA
Dioxins/Furans-Filtered																	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	5.6 U	NA	NA	6.1 J	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	1.4 U	NA	NA	1 U	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	1.5 U	NA	NA	2.5 J	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	2.9 J	NA	NA	3.1 J	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MW-40-99 05/03/04 MW4099GW (050304)	MW-40-99 10/26/04 MW40-99-GW-102604	MW-40-99 05/11/05 MW-40-99-GW-051105R2	MW-40-99 11/02/05 MW40-99-GW-110205FD	MW-40-99 05/17/06 MW-40-99-GW-051706TB	MW-40-99 08/15/06 MW40-99-WG-081506	MW-40-99 11/13/06 MW-40-99-WG-1113-06	MW-40-99 05/02/07 MW-40-99-GW-05-02-07	MW-40-99 11/07/07 MW40-99-GW-110707
Miscellaneous																
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans																
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	4.1 U	2.2 U	3.3 U	12 U	15 U	5.2 U	3.9 U	20 U	21 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.5 U	3.7 U	8.1 U	11 U	33 U	4.4 U	15 U	310	19 U
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	2.7 U	0.81 U	1.6 U	11 U	26 J	3.6 U	2.8 U	16 U	12 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	0.96 U	0.54 U	1.6 U	4.9 U	21 U	2.6 U	2.0 U	9.8 U	5.6 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	1.2 U	0.58 U	1.1 U	6.2 U	4.9 U	3.2 U	2.2 U	11 U	6.6 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.7 U	1.3 U	1.9 U	9.0 U	7.9 U	4.2 U	2.7 U	12 U	12 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.1 U	1.3 U	2.1 U	5.9 U	8.3 U	4.1 U	2.2 U	6.4 U	6.2 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	1.0 U	1.7 U	6.9 U	7.2 U	3.8 U	2.6 U	12 U	12 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.96 U	0.54 U	2.0 U	5.2 U	6.5 U	3.9 U	2.0 U	6.0 U	6.0 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.5 U	1.1 U	1.7 U	7.9 U	7.1 U	3.8 U	2.5 U	11 U	9.6 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.2 U	0.70 U	2.4 U	8.0 U	7.3 U	4.6 U	2.5 U	7.1 U	6.4 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	3.0 U	2.1 U	2.1 U	9.4 U	13 U	4.7 U	4.2 U	14 U	11 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.1 U	1.1 U	1.3 U	5.8 U	7.8 U	2.8 U	1.6 U	9.2 U	6.8 U
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.1 U	0.63 U	2.2 U	6.6 U	7.1 U	4.2 U	2.3 U	7.0 U	6.4 U
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.1 U	1.1 U	1.3 U	5.8 U	7.6 U	2.7 U	1.6 U	9.3 U	7.0 U
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	0.70 U	0.73 U	0.85 U	4.8 U	6.5 U	1.8 U	1.7 U	7.7 U	6.4 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	1.0 U	2.7 U	1.1 U	3.6 U	5.4 U	3.4 U	1.4 U	5.2 U	4.6 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.58 U	1.6 U	6.2 U	21 U	3.2 U	2.2 U	11 U	6.6 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.81 U	1.6 U	11 U	26	3.6 U	2.8 U	20 U	12 U
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.3 U	2.4 U	8.0 U	8.3 U	4.6 U	2.5 U	7.1 U	6.4 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.4 U	1.9 U	9.0 U	7.9 U	4.2 U	2.7 U	12 U	12 U
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.8 U	1.4 U	5.8 U	7.8 U	3.1 U	1.6 U	9.3 U	7.0 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	2.1 U	2.1 U	9.4 U	13 U	4.7 U	14 U	14 U	11 U
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	2.7 U	1.1 U	3.6 U	5.4 U	3.4 U	1.4 U	5.2 U	4.6 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.73 U	0.85 U	4.8 U	6.5 U	1.8 U	1.7 U	7.7 U	6.4 U
Dioxins/Furans-Filtered																
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MW-40-99 05/07/08 MW-40-99-GW-050708	MW-40-99 11/06/08 MW40-99-GW-110608	MW-42-99 06/21/01 MW-42-99-GW(18-23)	MW-42-99 01/07/02 MW42-99-GW-010702	MWD6R 11/12/07 MWD6R-GW-111207	MWW1-02 01/17/02 MWW1-02-GW-011702	MWW1-02 11/08/02 MWW102GW	MWW1-02 05/19/03 MWW102W(1-11)	MWW1-02 12/10/03 MWW102GW(1-11)	MWW1-02 05/03/04 MWW102GW (050304)
Miscellaneous																	
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	8.6 J [8.7 J]	NA	NA	NA	NA	NA
Dioxins/Furans																	
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	2.6 U	5.0 U	5 U	8.6 J	NA	1.8 U	50 U	6.3 UJ	9.7 U [10 U]	4.3 U [4.8 U]
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	17 U	4.4 U	5.7 J	6.4 U	NA	2.2 U	50 U	8.6 UJ	8.6 U [11 U]	2.1 U [1.5 U]
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	3.6 U	4.1 U	4 U	NA	1.2 U	25 U	4.0 UJ	5.1 U [5.4 U]	2.2 U [2.3 U]
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	2.0 U	2.1 U	2.1 U	2.5 J	NA	0.8 U	25 U	3.9 UJ	3.3 U [3.5 U]	0.76 U [0.87 U]
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	2.5 U	2.7 U	3.4 U	NA	1 U	25 U	3.7 UJ	3.8 U [4.1 U]	0.97 U [1.1 U]
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.6 U	3.8 U	2.4 U	2.5 U	NA	0.8 U	25 U	4.2 UJ	5.6 U [5.4 U]	1.4 U [1.4 U]
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.94 U	2.9 U	1.6 U	1.7 U	NA	0.5 U	25 U	4.8 UJ	4.7 U [5.2 U]	1.0 U [1.5 U]
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.6 U	3.4 U	2.4 U	2.6 U	NA	0.9 U	25 U	4.4 UJ	5.3 U [5.2 U]	1.1 U [1.1 U]
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.89 U	2.5 U	1.5 U	1.8 U	NA	0.5 U	25 U	4.7 UJ	4.4 U [4.7 U]	0.85 U [1.3 U]
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.4 U	3.4 U	2.2 U	2.6 U	NA	0.8 U	25 U	4.0 UJ	5.2 U [5 U]	1.2 U [1.2 U]
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	1.0 U	2.9 U	1.8 U	2.2 U	NA	0.7 U	25 U	5.3 UJ	5.0 U [5.5 U]	1.1 U [1.7 U]
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	5.3 U	2.3 U	2.6 U	NA	1.3 U	10 U	4.0 UJ	5.0 U [6 U]	2.7 U [3.2 U]
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.3 U	3.3 U	1.7 U	2 U	NA	1 U	10 U	2.6 UJ	3.6 U [3.7 U]	1.1 U [1.2 U]
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.96 U	2.8 U	1.7 U	1.8 U	NA	0.6 U	25 U	4.9 UJ	4.6 U [5 U]	0.97 U [1.5 U]
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.3 U	3.4 U	1.6 U	1.9 U	NA	0.9 U	10 U	2.6 UJ	3.5 U [3.6 U]	1.1 U [1.2 U]
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	1.3 U	3.4 U	2.5 U	2.1 U	NA	1.2 U	10 U	2.1 UJ	3.5 U [3.3 U]	0.84 U [0.96 U]
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	0.91 U	2.3 U	1.7 U	1.5 U	NA	0.9 U	10 U	1.6 UJ	2.2 U [2.7 U]	1.0 U [1 U]
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	2.0 U	2.5 U	2.4 U	2.5 J	NA	0.8 U	NA	NA	NA	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	3.6 U	4.1 U	4 U	NA	1.2 U	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	0.94 U	2.9 U	1.7 U	2.6	NA	0.6 U	NA	NA	NA	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.6 U	3.8 U	2.3 U	2.6 U	NA	0.9 U	NA	NA	NA	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.3 U	3.4 U	3.2	3.7 J	NA	0.9 U	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	2.4 U	5.3 U	2.3 U	2.6 U	NA	12 J	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	0.91 U	2.3 U	28.6 J	19.5 J	NA	0.9 U	NA	NA	NA	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.3 U	3.4 U	2.5 U	2.1 U	NA	1.2 U	NA	NA	NA	NA
Dioxins/Furans-Filtered																	
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW1-02 10/26/04 MWW1-02-GW-102604	MWW1-02 05/11/05 MWW1-02-GW-051105R2	MWW1-02 11/02/05 MWW1-02-GW-110205FD	MWW1-02 05/17/06 MWW1-02-GW-051706	MWW1-02 11/13/06 MWW1-02-WG-111306	MWW1-02 05/03/07 MWW1-02-GW-05-03-07	MWW1-02 11/07/07 MWW1-02-GW-110707	MWW1-02 05/07/08 MWW1-02-GW-050708	MWW1-02 11/06/08 MWW1-02-GW-110608
Miscellaneous																
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans																
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	4.6 U [2.1 U]	2.4 U	13 U [18 U]	16 U [16 U]	3.8 U	19 U	14 U	2.4 U	4.6 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	4.5 U [2.9 U]	5.3 U	15 U [12 U]	18 U [28 U]	14 U	15 U	13 U	15 U	4.9 U
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	1.9 U [0.62 U]	1.5 U	12 U [12 U]	14 U [22 U]	2.7 U	9.7 U	7.9 U	1.7 U	3.6 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	1.1 U [0.54 U]	1.4 U	5.8 U [4.9 U]	14 U [16 U]	2.0 U	8.2 U	4.7 U	1.3 U	2.6 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	1.3 U [0.64 U]	1.3 U	7.3 U [6.2 U]	7.1 U [6.6 U]	2.3 U	9.4 U	5.5 U	1.5 U	3.0 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.8 U [1.9 U]	1.7 U	8.9 U [9.6 U]	9.4 U [8.5 U]	2.4 U	8.9 U	7.1 U	1.4 U	4.4 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.67 U [0.72 U]	2.1 U	5.9 U [5.9 U]	8.3 U [8.1 U]	2.2 U	6.4 U	4.1 U	1.1 U	3.1 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.4 U [1.5 U]	1.5 U	6.8 U [7.4 U]	8.6 U [7.7 U]	2.3 U	8.8 U	7.7 U	1.4 U	3.9 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.56 U [0.61 U]	2.0 U	5.2 U [5.2 U]	7.7 U [7.4 U]	2.0 U	6.0 U	4.0 U	1.1 U	2.7 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	1.4 U [1.5 U]	1.6 U	7.8 U [8.4 U]	8.3 U [7.5 U]	2.2 U	8.3 U	5.9 U	1.2 U	3.9 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.72 U [0.78 U]	2.5 U	8.0 U [8 U]	8.7 U [8.4 U]	2.5 U	7.1 U	4.2 U	1.2 U	3.1 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	1.7 U [2.1 U]	1.9 U	8.4 U [9.2 U]	17 U [16 U]	3.3 U	13 U	7.6 U	2.5 U	4.4 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.2 U [1.1 U]	1.4 U	5.4 U [5.6 U]	11 U [10 U]	1.9 U	8.7 U	5.0 U	1.4 U	3.3 U
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	0.65 U [0.7 U]	2.2 U	6.5 U [6.6 U]	8.4 U [8.1 U]	2.2 U	7.0 U	4.2 U	1.1 U	3.0 U
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	1.2 U [1.1 U]	1.4 U	5.4 U [5.6 U]	11 U [10 U]	1.9 U	8.8 U	5.1 U	1.5 U	3.4 U
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	0.83 U [0.82 U]	0.99 U	4.3 U [4.3 U]	9.3 U [8.9 U]	1.4 U	8.1 U	4.7 U	1.2 U	3.4 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	2.6 U [2.2 U]	1.4 U	3.7 U [3.5 U]	8.5 U [9.4 UJ]	1.5 U	5.1 U	3.6 U	0.98 U	2.0 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	1.3 U [0.64 U]	1.4 U	7.3 U [6.2 U]	14 U [16 U]	2.3 U	9.4 U	5.5 U	1.9 U	3.0 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.9 U [0.62 U]	1.5 U	12 U [12 U]	14 U [22 U]	2.7 U	9.7 U	7.9 U	2.1 U	3.6 U
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	0.72 U [0.78 U]	2.5 U	8.0 U [8 U]	8.7 U [8.4 U]	2.5 U	7.1 U	4.2 U	1.2 U	3.1 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.8 U [1.9 U]	1.7 U	8.9 U [9.6 U]	9.4 U [8.5 U]	2.4 U	8.9 U	7.7 U	1.4 U	4.4 U
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	2.0 U [1.9 U]	1.8 U	5.4 U [5.6 U]	11 U [12 U]	1.9 U	8.8 U	5.1 U	1.5 U	3.4 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	1.7 U [2.1 U]	1.9 U	8.4 U [9.2 U]	17 U [16 U]	9.5 U	13 U	8.4 U	2.5 U	4.4 U
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	2.6 U [2.2 U]	1.4 U	3.7 U [3.5 U]	8.5 U [9.4 U]	1.5 U	5.1 U	3.6 U	0.98 U	2.0 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	0.83 U [0.82 U]	0.99 U	4.3 U [4.3 U]	9.3 U [8.9 U]	1.4 U	8.1 U	4.7 U	1.2 U	3.4 U
Dioxins/Furans-Filtered																
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW1-02 08/21/13 MWW1-02_08212013	MWW1-03 01/17/02 MWW1-03-GW-011702	MWW1-03 11/08/02 MWW103GW	MWW1-03 05/19/03 MWW103W(1-11)	MWW1-03 12/10/03 MWW103GW(1-11)	MWW1-03 05/03/04 MWW103GW (050304)	MWW1-03 10/26/04 MWW1-03-GW-102604	MWW1-03 05/11/05 MWW1-03-GW-051105R2	MWW1-03 11/02/05 MWW1-03-GW-110205FD
Miscellaneous																
Hardness	- -	- -	- -	- -	- -	- -	mg/L	530	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans																
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.6 UJ	50 U	6.5 UJ	10 U	3.8 U	2.4 U	2.2 U [1.8 U]	14 U
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.9 U	50 U	7.0 UJ	8.3 U	7.2 U	4.3 U	10 U [7.1 U]	18 U
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	1.1 UJ	25 U	4.0 UJ	4.6 U	1.8 U	0.61 U	1.2 U [1.2 U]	8.9 U
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.7 U	25 U	4.5 UJ	2.9 U	0.67 U	2.1 U	0.98 U [1.3 U]	5.1 U
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.9 U	25 U	3.3 UJ	3.3 U	0.82 U	0.55 U	1.1 U [0.93 U]	6.5 U
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	25 U	4.2 UJ	5.6 U	1.4 U	1.4 U	1.8 U [1.5 U]	7.3 U
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.5 UJ	25 U	4.6 UJ	5.0 U	1.1 U	2.4 U	2.0 U [1.6 U]	6.0 U
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	0.9 U	25 U	4.4 UJ	5.3 U	1.2 U	1.1 U	1.6 U [1.4 U]	5.6 U
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.5 U	25 U	4.5 UJ	4.6 U	0.93 U	0.75 U	2.0 U [1.6 U]	5.2 U
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	25 U	4.0 UJ	5.2 U	1.2 U	1.1 U	1.7 U [1.4 U]	6.4 U
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.7 U	25 U	5.1 UJ	5.3 U	1.2 U	0.61 U	2.4 U [1.9 U]	8.0 U
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	NA	1.3 U	10 U	3.8 UJ	5.4 U	2.7 U	1.7 U	2.3 U [2.1 U]	8.0 U
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	1 U	10 U	2.7 UJ	3.9 U	1.1 U	1.1 U	1.3 U [1.4 U]	5.1 U
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.6 U	25 U	4.7 UJ	4.8 U	1.1 U	0.54 U	2.1 U [1.7 U]	6.6 U
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.9 U	10 U	2.7 UJ	3.8 U	1.1 U	1.1 U	1.3 U [1.4 U]	5.1 U
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	NA	1.1 U	10 U	2.4 UJ	3.3 U	0.82 U	0.83 U	0.98 U [0.79 U]	4.8 U
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	10 U	1.7 UJ	2.3 U	0.98 U	2.7 U	1.2 U [1 U]	3.5 U
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	NA	NA	NA	NA	2.1 U	1.1 U [1.3 U]	6.5 U
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	3.8 J	NA	NA	NA	NA	0.73 U	2.0 U [1.4 U]	8.9 U
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	3.3	NA	NA	NA	NA	2.4 U	2.4 U [1.9 U]	8.0 U
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	NA	NA	NA	NA	1.4 U	1.8 U [1.5 U]	7.3 U
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.9 U	NA	NA	NA	NA	1.8 U	1.5 U [1.4 U]	5.1 U
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.8 J	NA	NA	NA	NA	1.7 U	2.3 U [2.1 U]	8.0 U
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	NA	0.8 U	NA	NA	NA	NA	2.7 U	1.2 U [1 U]	3.5 U
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	NA	1.1 U	NA	NA	NA	NA	0.83 U	0.98 U [0.79 U]	4.8 U
Dioxins/Furans-Filtered																
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW1-03 05/17/06 MWW1-03-GW-051706TB	MWW1-03 08/15/06 MWW1-03-WG-081506	MWW1-03 08/15/06 MWW1-03-WG-081506(DISS)	MWW1-03 11/13/06 MWW1-03-WG-111306	MWW1-03 05/04/07 MWW1-03-GW-050407	MWW1-03 11/07/07 MWW1-03-GW-110707	MWW1-03 05/07/08 MWW1-03-GW-050708	MWW1-03 11/06/08 MWW1-03-GW-110608
Miscellaneous															
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
pH (water)	- -	- -	- -	- -	- -	- -	none	NA	NA	NA	NA	NA	NA	NA	NA
Dioxins/Furans															
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	- -	- -	- -	- -	- -	- -	pg/L	12 U	4.3 U	NA	4.7 U [4.8 U]	4.8 U [5.1 U]	9.7 U [7.7 U]	3.7 U [7.3 U]	4.2 U [5.1 U]
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	60 J	8.1 U	NA	19 U [22 U]	6.8 UJ [7.5 UJ]	11 U [7.6 U]	4.8 U [6.7 U]	6.0 U [5.3 U]
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	23 U	2.8 U	NA	3.4 U [3.1 U]	3.3 U [1.9 U]	5.6 U [4.8 U]	2.0 U [4.4 U]	4.9 U [4.3 U]
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	16 U	2.3 U	NA	2.0 U [2 U]	2.3 U [1.8 U]	5.4 U [2.9 U]	1.8 U [3.3 U]	2.2 U [2.6 U]
1,2,3,4,7,8,9-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	7.6 U	2.8 U	NA	2.4 U [2.3 U]	3.0 U [2.3 U]	6.3 U [3.4 U]	2.2 U [4.1 U]	2.5 U [3.1 U]
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	8.2 U	3.1 U	NA	3.0 U [3.1 U]	6.8 U [6.9 U]	6.9 U [4.6 U]	2.1 U [4.5 U]	4.0 U [4.4 U]
1,2,3,4,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	8.0 U	4.0 U	NA	2.1 U [2.3 U]	4.2 U [4.8 U]	4.4 U [2.9 U]	1.4 U [2.2 U]	2.9 U [3.4 U]
1,2,3,6,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	7.5 U	2.8 U	NA	2.9 U [3 U]	4.8 U [4.9 U]	7.4 U [5 U]	2.0 U [3.8 U]	3.5 U [3.9 U]
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	7.4 U	3.8 U	NA	1.9 U [2.1 U]	3.6 U [4.2 U]	4.3 U [2.9 U]	1.3 U [1.9 U]	2.5 U [2.9 U]
1,2,3,7,8,9-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	7.3 U	2.8 U	NA	2.8 U [2.9 U]	5.3 U [5.5 U]	5.7 U [3.8 U]	1.8 U [4 U]	3.5 U [3.9 U]
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	8.3 U	4.5 U	NA	2.4 U [2.7 U]	5.1 U [5.9 U]	4.5 U [3 U]	1.5 U [2.5 U]	2.9 U [3.4 U]
1,2,3,7,8-PeCDD	- -	- -	- -	- -	- -	- -	pg/L	16 U	4.0 U	NA	3.4 U [4 U]	4.0 U [4.5 U]	9.7 U [6.6 U]	3.0 U [4.6 U]	5.3 U [5.3 U]
1,2,3,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	11 U	2.6 U	NA	1.8 U [1.9 U]	2.8 U [2.3 U]	5.8 U [4.3 U]	1.9 U [2.5 U]	3.9 U [4 U]
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	8.1 U	4.1 U	NA	2.2 U [2.4 U]	4.4 U [5 U]	4.5 U [3 U]	1.3 U [2.2 U]	2.8 U [3.2 U]
2,3,4,7,8-PeCDF	- -	- -	- -	- -	- -	- -	pg/L	11 U	2.6 U	NA	1.8 U [1.9 U]	2.6 U [2.2 U]	6.0 U [4.4 U]	2.0 U [2.6 U]	4.1 U [4.2 U]
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	4.1 UJ	2.3 U	NA	1.3 U [1.3 U]	1.9 U [2.3 U]	5.0 U [3.2 U]	1.4 U [2.4 U]	3.3 U [3.8 U]
2,3,7,8-TCDF	- -	- -	- -	- -	- -	- -	pg/L	3.8 UJ	2.3 U	NA	1.4 U [1.5 U]	2.2 U [4.9 U]	3.7 U [2.6 U]	1.1 U [1.7 U]	2.3 U [2.4 U]
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	16 U	2.8 U	NA	2.4 U [2.3 U]	3.0 U [2.3 U]	6.3 U [3.4 U]	2.2 U [4.1 U]	2.5 U [3.1 U]
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	23 U	2.8 U	NA	3.4 U [3.1 U]	3.3 U [1.9 U]	5.6 U [4.8 U]	2.0 U [4.4 U]	4.9 U [4.3 U]
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	8.3 U	4.5 U	NA	2.4 U [2.7 U]	5.1 U [5.9 U]	4.5 U [3 U]	1.5 U [2.5 U]	2.9 U [3.4 U]
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	8.2 U	3.1 U	NA	3.0 U [3.1 U]	6.8 U [6.9 U]	7.4 U [5 U]	2.1 U [4.5 U]	4.0 U [4.4 U]
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	11 U	3.0 U	NA	1.8 U [1.9 U]	4.1 U [2.3 U]	6.1 U [4.6 U]	2.0 U [2.6 U]	4.1 U [4.2 U]
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	21 U	4.0 U	NA	13 U [11 U]	4.0 U [4.5 U]	9.7 U [6.6 U]	3.0 U [4.6 U]	5.3 U [5.3 U]
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	3.8 U	2.3 U	NA	1.6 U [1.5 U]	13 J [4.9 U]	3.7 U [2.6 U]	1.1 U [1.7 U]	2.3 U [2.4 U]
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	4.1 U	2.3 U	NA	1.3 U [1.3 U]	1.9 U [2.3 U]	5.0 U [3.2 U]	1.4 U [2.4 U]	3.3 U [3.8 U]
Dioxins/Furans-Filtered															
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total hexachlorodibenzofuran (HxCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total pentachlorodibenzo-p-dioxin (PeCDD) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA
Total tetrachlorodibenzofuran (TCDF) (dissolved)	- -	- -	- -	- -	- -	- -	pg/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
mg/L	milligrams per liter
NA	Not applicable.
PCBs	Polychlorinated Biphenyls
pg/L	picograms per liter
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-10 06/21/01 MW-10-GW(15-20)(D	MW-10 06/21/01 MW-10-GW(15-20)06210	MW-10 01/07/02 MW-10-GW	MW-19 08/28/01 MW-19-GW(24-29)DI-N	MW-19 08/28/01 MW-19-GW(24-29)-N	MW-19 01/07/02 MW-19-GW	MW-29-99 06/22/01 MW-29-99-GW(15-20)06	MW-29-99 06/22/01 MW29-99GW(15-20)D	MW-29-99 01/10/02 MW29-99-GW	MW-30-99 06/25/01 MW30-99(17.4-22.4)06	MW-30-99 01/07/02 MW30-99-GW	MW-31-99 06/25/01 MW31-99(21.5-26.5)06
PCBs																		
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	NA	0.20 U [0.2 U]	0.20 U	NA	0.061 U	0.20 U	0.20 U	NA	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	NA	0.20 U [0.2 U]	0.20 U	NA	0.044 U	0.20 U	0.20 U	NA	0.23	0.20 U	0.20 U	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	NA	0.4 U [0.4 U]	0.4 U	NA	0.11 U	0.4 U	0.4 U	NA	0.23	0.4 U	0.4 U	0.4 U
PCBs - Filtered																		
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	0.20 U [0.2 U]	NA	NA	0.075 U	NA	NA	NA	0.20 U	NA	0.20 U	NA	0.20 U

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-31-99 01/07/02 MW31-99-GW	MW-33-99 06/25/01 MW33-99(22.9-27.9)	MW-33-99 06/25/01 MW33-99(22.9-27.9)06	MW-33-99 01/07/02 MW33-99-GW	MW-34-99 08/28/01 MW-34-99-GW(25-30)-N	MW-34-99 08/28/01 MW-34-99GW25-30.-N	MW-34-99 01/07/02 MW34-99-GW	MW-39-99 08/28/01 MW-39-99-GW(25-30)-N	MW-39-99 08/28/01 MW-39-99-GW(25-30-N	MW-39-99 01/10/02 MW39-99-GWDL	MW-40-99 01/10/02 MW40-99-GW	MW-40-99 11/12/02 MW40-99-GW02
PCBs																		
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	NA	0.20 U	0.061 U	NA	0.20 U [0.2 U]	3.0	NA	3.3	0.20 U	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	NA	0.20 U	0.044 U	NA	0.20 U [0.2 U]	0.088 U	NA	2.0 U	0.46	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.4 U	NA	0.4 U	0.11 U	NA	0.4 U [0.4 U]	3	NA	3.3	0.46	0.4 U
PCBs - Filtered																		
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	0.40	NA	NA	0.075 U	NA	NA	0.075 U	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 05/19/03 MW4099W(11-16)	MW-40-99 12/11/03 MW4099GW(11-16)	MW-40-99 05/03/04 MW4099GW (050304)	MW-40-99 10/26/04 MW40-99-GW-102604	MW-40-99 05/11/05 MW-40-99-GW-051105	MW-40-99 11/02/05 MW40-99-GW-110205FD	MW-40-99 05/17/06 MW-40-99-GW-051706TB	MW-40-99 11/13/06 MW-40-99-WG-1113-06	MW-40-99 05/02/07 MW-40-99-GW-05-02-07	MW-40-99 11/07/07 MW40-99-GW-110707
PCBs																
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 UJ [0.2 UJ]	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 UJ [0.2 UJ]	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U [0.4 U]	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCBs - Filtered																
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 05/07/08 MW-40-99-GW-050708	MW-40-99 11/06/08 MW40-99-GW-110608	MW-40-99 10/26/17 MW-40-99_GW-102617	MW-40-99 10/03/18 MW-40-99_GW-100318	MW-42-99 06/21/01 MW-42-99-GW(18-23)	MW-42-99 06/21/01 MW42-99GW(18-23)D	MW-42-99 01/07/02 MW42-99-GW	MWD6R 11/16/06 MWD-6R-WG-111606	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808
PCBs																	
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	0.1 U	0.1 U	0.20 U	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	0.1 U	0.1 U	0.20 U	NA	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.4 U	0.1 U	0.1 U	0.4 U	NA	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCBs - Filtered																	
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	NA	NA	NA	0.20 U	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWD6R 11/05/08 MWD6R-GW-110508	MWW1-02 01/17/02 MWW1-02-GW-N	MWW1-02 11/08/02 MWW102GW110802	MWW1-02 05/19/03 MWW102W(1-11)	MWW1-02 12/10/03 MWW102GW(1-11)	MWW1-02 05/03/04 MWW102GW (050304)	MWW1-02 10/26/04 MWW1-02-GW-102604	MWW1-02 05/11/05 MWW1-02-GW-051105	MWW1-02 11/02/05 MWW1-02-GW-110205FD	MWW1-02 05/17/06 MWW1-02-GW-051706	MWW1-02 11/13/06 MWW1-02-WG-111306
PCBs																	
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.061 UJ	0.20 U	0.20 UJ	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.044 UJ	0.20 U	0.20 UJ	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.11 U	0.4 U	0.4 U	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U
PCBs - Filtered																	
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-02 05/03/07 MWW1-02-GW-05-03-07	MWW1-02 11/07/07 MWW1-02-GW-110707	MWW1-02 05/07/08 MWW1-02-GW-050708	MWW1-02 11/06/08 MWW1-02-GW-110608	MWW1-02 08/21/13 MWW1-02_08212013	MWW1-03 01/17/02 MWW1-03-GW-N	MWW1-03 11/08/02 MWW103GW110802	MWW1-03 05/19/03 MWW103W(1-11)	MWW1-03 12/10/03 MWW103GW(1-11)	MWW1-03 05/03/04 MWW103GW (050304)	MWW1-03 10/26/04 MWW1-03-GW-102604
PCBs																	
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.061 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.098 U	0.044 U	0.20 U	0.20 UJ	0.20 U	0.20 U	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.4 U	0.4 U	0.4 U	0.098 U	0.11 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U
PCBs - Filtered																	
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-03 05/11/05 MWW1-03-GW-051105	MWW1-03 09/20/05 MWW1-03-GW-092005	MWW1-03 11/02/05 MWW1-03-GW-110205FD	MWW1-03 05/17/06 MWW1-03-GW-051706TB	MWW1-03 11/13/06 MWW1-03-WG-111306	MWW1-03 05/04/07 MWW1-03-GW-050407	MWW1-03 11/07/07 MWW1-03-GW-110707	MWW1-03 05/07/08 MWW1-03-GW-050708	MWW1-03 11/06/08 MWW1-03-GW-110608	MWW1-03 08/21/13 MWW1-03_08212013
PCBs																
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.098 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.064 J [0.2 J]	0.86	0.20 U	0.20 U	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.20 U [0.2 U]	0.098 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.064 J [0.2 J]	0.86	0.4 U	0.4 U	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U [0.4 U]	0.4 U [0.4 U]	0.098 U
PCBs - Filtered																
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-05 08/19/02 MWW1-05-081902
PCBs							
Aroclor-1248	0.5	0.5	0.2	**45**	- -	- -	0.20 U
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U
PCBs - Filtered							
Aroclor-1242 (PCB-1242) (dissolved)	0.5	0.5	0.2	**45**	- -	- -	NA

See Notes on last page.

Table 4-21 W-01 Groundwater PCB
RACER - Pontiac North Campus

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
PCBs	Polychlorinated Biphenyls
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-10 06/21/01 MW-10-GW(15-20)06210	MW-10 01/07/02 MW-10-GW	MW-19 08/28/01 MW-19-GW(24-29)-N	MW-19 01/07/02 MW-19-GW	MW-19 01/07/02 MW-19-GWDL	MW-29-99 06/22/01 MW-29-99-GW(15-20)06	MW-29-99 01/10/02 MW29-99-GW	MW-30-99 06/25/01 MW30-99(17.4-22.4)06	MW-30-99 01/07/02 MW30-99-GW	MW-30-99 01/07/02 MW30-99-GWDL	MW-31-99 06/25/01 MW31-99(21.5-26.5)06	MW-31-99 01/07/02 MW31-99-GW	MW-31-99 01/07/02 MW31-99-GWDL	MW-33-99 06/25/01 MW33-99(22.9-27.9)
Volatile Organics																				
Benzene	5	5	200	**35,000**	1,750,000	68,000	0.34 J [0.38 J]	0.19 J	0.16 U	1.0 U	NA	1.0 U	1.0 U	0.26 J	0.21 J	NA	0.16 J	1.0 U	NA	6.2
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U [10 U]	0.43 J	1.1 J	10 U	NA	0.91 J	10 UJ	10 U	10 U	NA	7.3 J	0.55 J	NA	1.1 J
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U [1 U]	1.0 U	0.20 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.2 [1.4]	1.4	0.26 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	24	7.0	NA	5.9
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U [0.22 J]	1.0 U	0.13 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.15 J	NA	1.0 U	0.17 J	NA	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	0.81 J [0.83 J]	0.20 J	0.13 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U [1 U]	1.0 U	0.11 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U [1 U]	0.16 J	0.16 U	1.0 U	NA	0.19 J	1.0 U	1.0 U	1.0 U	NA	5.3	2.5	NA	0.32 J
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U [1 U]	1.0 U	0.21 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.45 J	1.0 U	NA	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	0.50 U [0.5 U]	0.50 U	0.22 U	0.50 U	NA	2.0	0.50 U	0.50 U	0.50 U	NA	0.45 J	0.50 U	NA	0.50 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.50 U [0.5 U]	0.50 U	0.15 U	0.50 U	NA	2.1	0.50 U	0.50 U	0.50 U	NA	0.25 J	0.50 U	NA	0.50 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U [1 U]	1.0 U	0.34 U	1.0 UJ	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	0.50 J
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U [1 U]	1.0 U	0.12 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.6 [1.8]	1.8	0.12 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	0.42 J
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	0.85 J [0.88 J]	0.41 J	0.15 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U [10 U]	10 U	0.23 U	10 U	NA	10 U	10 U	10 U	10 U	NA	10 U	10 U	NA	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U [5 U]	5.0 U	0.13 U	5.0 U	NA	5.0 U	5.0 U	2.3 J	0.84 J	NA	5.0 U	5.0 U	NA	5.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U [1 U]	1.0 U	0.23 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.43 J	0.70 J	NA	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U [1 U]	1.0 U	0.18 U	0.33 J	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U [1 U]	1.0 U	0.14 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U [1 U]	1.0 U	0.15 U	1.0 U	NA	0.18 J	1.0 U	1.0 U	0.24 J	NA	18	4.3	NA	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U [1 U]	1.0 U	0.33 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 U
Semivolatile Organics																				
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U [5 U]	5.0 U	0.85 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U [5 U]	5.0 U	0.64 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U [5 U]	5.0 U	0.80 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U [10 U]	10 U	2.6 U	NA	25 U	10 U	10 U	10 U	NA	40 U	10 U	NA	40 U	10 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U [5 U]	5.0 U	0.68 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U [5 U]	5.0 U	2.7 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 U [5 U]	5.0 U	0.67 U	NA	2.3 J	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 U [5 U]	5.0 U	1.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U [5 U]	5.0 U	0.75 U	NA	12 U	5.0 U	5.0 U	5.0 U	NA	20 U	5.0 U	NA	20 U	5.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-33-99 01/07/02 MW33-99-GW	MW-34-99 08/28/01 MW-34-99-GW(25-30)-N	MW-34-99 08/28/01 MW-34-99GW25-30-N	MW-34-99 01/07/02 MW34-99-GW	MW-39-99 08/28/01 MW-39-99-GW(25-30)-N	MW-39-99 01/10/02 MW39-99-GW	MW-39-99 01/10/02 MW39-99-GWDL	MW-40-99 01/10/02 MW40-99-GW	MW-40-99 11/12/02 MW40-99-GW02	MW-40-99 11/12/02 MW40-99-GWDL	MW-40-99 05/19/03 MW4099W(11-16)	MW-40-99 12/11/03 MW4099GW(11-16)	MW-40-99 05/03/04 MW4099GW (050304)
Volatile Organics																			
Benzene	5	5	200	**35,000**	1,750,000	68,000	10	NA	7.3	9.3 [10]	3.3	3.2	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	0.86 J	NA	0.41 U	1.2 J [1.2 J]	0.45 J	10 UJ	NA	10 UJ	10 UJ	NA	1.1 J [1 J]	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	NA	0.20 U	1.0 U [1 U]	0.20 U	1.0 U	NA	1.0 U	1.3	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	6.9	NA	0.26 U	1.0 U [1 U]	0.26 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	0.13 J	NA	0.13 U	1.0 U [1 U]	0.13 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	2.4	NA	2.7	4.5 [5]	0.94 J	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	NA	0.48 J	0.53 J [0.74 J]	0.11 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	0.26 J	NA	0.74 J	0.95 J [0.95 J]	0.16 U	1.0 U	NA	1.0 U	1.0 UJ	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	NA	0.21 U	1.0 U [1 U]	0.21 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	0.50 U	NA	2.8	3.8 [4]	0.22 U	0.50 U	NA	0.50 U	0.50 U	NA	0.50 UJ [0.5 UJ]	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.50 U	NA	0.15 U	0.50 U [0.5 U]	0.15 U	0.50 U	NA	0.50 U	0.50 U	NA	0.50 UJ [0.5 UJ]	0.50 U	0.50 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	0.58 J	NA	0.34 U	1.0 U [1 U]	0.34 U	1.0 U	NA	1.0 U	1.0 UJ	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	NA	15	18 [20]	0.12 U	1.0 U	NA	1.0 U	1.0 UJ	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.2	NA	1.9	2.3 [3.2]	0.28 J	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	0.37 J	NA	3.4	6.4 [7.6]	0.15 U	1.0 U	NA	0.33 J	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 UJ	NA	0.23 U	10 U [0.46 J]	0.41 J	10 U	NA	10 U	10 U	NA	10 UJ [10 UJ]	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	NA	0.13 U	5.0 U [5 U]	0.13 U	5.0 U	NA	5.0 U	5.0 U	NA	5.0 UJ [5 UJ]	5.0 U	5.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	NA	0.23 U	1.0 U [1 U]	0.23 U	1.0 U	NA	1.0 U	R	NA	1.0 UJ [1 UJ]	1.0 U	R
Toluene	790	790	270	**530,000**	526,000	61,000	0.28 J	NA	4.1	5.5 [5.7]	0.27 J	0.29 J	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	NA	0.62 J	0.80 J [0.89 J]	0.14 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 UJ
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	NA	5.6	7.8 [8.8]	0.15 U	1.0 U	NA	1.0 U	1.0 U	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.4	NA	33	29 [42]	0.33 U	1.0 U	NA	1.0 U	1.0 UJ	NA	1.0 UJ [1 UJ]	1.0 U	1.0 U
Semivolatile Organics																			
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	0.85 U	NA	2.0 J [1.8 J]	0.85 U	NA	12 U	5.0 U	NA	R	5.0 UJ [5 UJ]	5.0 U	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	2.6 J	NA	6.7 [5.5]	0.64 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	0.80 U	NA	5.0 U [5 U]	0.80 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U	2.7 J	NA	10 U [10 U]	2.6 U	NA	25 U	10 U	NA	40 U	10 UJ [10 UJ]	10 U	10 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 UJ	0.68 U	NA	5.0 U [5 U]	0.68 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 UJ	2.7 U	NA	5.0 U [5 U]	2.7 J	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 UJ	1.5 J	NA	1.4 J [1.3 J]	0.67 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 UJ	1.0 U	NA	5.0 U [5 U]	1.0 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U	8.0	NA	14 [12]	0.75 U	NA	12 U	5.0 U	NA	20 U	5.0 UJ [5 UJ]	5.0 U	5.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 10/26/04 MW40-99-GW-102604	MW-40-99 10/26/04 MW40-99-GW-102604DL	MW-40-99 05/11/05 MW-40-99-GW-051105	MW-40-99 11/02/05 MW40-99-GW-110205FD	MW-40-99 05/17/06 MW-40-99-GW-051706TB	MW-40-99 11/13/06 MW-40-99-WG-1113-06	MW-40-99 05/02/07 MW-40-99-GW-05-02-07	MW-40-99 11/07/07 MW40-99-GW-110707	MW-40-99 05/07/08 MW-40-99-GW-050708	MW-40-99 05/07/08 MW-40-99-GW-050708DL
Volatile Organics																
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 UJ	NA	10 U	10 U	10 U	0.72 J	1.7 J	0.93 J	1.2 J	NA
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	0.84 J	NA	1.0 U	1.0 U	1.0 U	0.32 J	1.0 U	1.0 U	1.0 U	NA
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	0.20 J	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	NA	1.0 U	0.53 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U	NA
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.18 J	NA
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	NA
Semivolatile Organics																
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	NA	40 U	10 U	10 U	10 U	10 U	10 U	10 U	NA	25 U
Anthracene	43	43	- -	**43**	43.4	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	20 U	5.0 U	5.0 U	1.7 J	5.0 U	5.0 U	5.0 U	NA	12 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	20 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA	12 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 11/06/08 MW40-99-GW-110608	MW-40-99 11/06/08 MW40-99-GW-110608R2	MW-40-99 12/15/09 MW-40-99-GW-121509	MW-40-99 11/03/10 MW40-99(110310)-GW	MW-40-99 09/25/11 MW40-99_092511	MW-40-99 10/03/12 MW-40-99_100312	MW-40-99 12/03/13 MW-40-99_20131203	MW-40-99 09/18/14 MW-40-99_091814	MW-40-99 09/22/15 MW 40-99 (09222015)	MW-40-99 09/20/16 MW40-99_092016	MW-40-99 12/21/16 MW-40-99-GW-122116
Volatile Organics																	
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	1.1 J	NA	1.8 J	25 U	0.68 J	25 U	25 U	25 U	25 U	25 U	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	NA	0.49 J	5.0 U	5.0 U	5.0 U	0.26 J	5.0 U	5.0 U	5 U	5 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	5 U	5 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	NA	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	5 U	5 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 UJ	NA	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	NA	1 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	NA	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 UJ	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	NA	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	1 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 UJ	NA	0.61 J	1.0 U	0.29 J	0.19 J	0.18 J	1.0 U	1.0 U	NA	1 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	NA	10 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5 U	5 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.16 J	1.0 U	1.0 U	1.0 U	1 U	1 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1 U	1 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	NA	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	NA	NA
Semivolatile Organics																	
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	NA	10 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	43	43	- -	**43**	43.4	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MW-40-99 10/26/17 MW-40-99_GW-102617	MW-40-99 01/15/18 MW-40-99_GW-011518	MW-40-99 10/03/18 MW-40-99_GW-100318	MW-42-99 06/21/01 MW-42-99-GW(18-23)	MW-42-99 06/21/01 MW-42-99-GW(18-23)DL	MW-42-99 01/07/02 MW42-99-GW	MW-42-99 01/07/02 MW42-99-GWDL	MWD6R 11/13/06 MWD6R-WG-111306	MWD6R 05/04/07 MWD6R-GW-050407	MWD6R 11/08/07 MWD6R-GW-110807	MWD6R 05/08/08 MWD6R-GW-050808
Volatile Organics																	
Benzene	5	5	200	**35,000**	1,750,000	68,000	1 U	1 U	1 U	NA	82	NA	91	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	25 U	25 U	25 U	NA	33 U	NA	2.9 J	10 U	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	5 U	5 U	5 U	NA	3.3 U	NA	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	5 U	5 U	5 U	NA	45	NA	44	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	5 U	5 U	5 U	NA	3.3 U	NA	3.3 U	1.0 U	1.0 U	0.38 J	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1 U	1 U	NA	19	NA	14	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1 U	1 U	1 U	NA	2.0 J	NA	2.0 J	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1 U	1 U	1 U	NA	23	NA	14	1.0 U	1.0 U	1.0 U	1.0 UJ
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1 U	1 U	1 U	NA	3.3 U	NA	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1 U	1 U	1 U	NA	1.7	NA	1.8	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1 U	1 U	1 U	NA	1.7 U	NA	1.7 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	5 U	5 U	5 U	NA	3.7	NA	4.5	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1 U	1 U	1 U	NA	6.3	NA	4.5	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1 U	1 U	1 U	NA	8.2	NA	8.6	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1 U	1 U	1 U	NA	7.6	NA	6.4	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	50 U	50 U	50 U	NA	1.1 J	NA	33 U	10 U	10 U	10 U	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5 U	5 U	5 U	NA	17 U	NA	17 U	5.0 U	5.0 U	5.0 U	5.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1 U	1 U	1 U	NA	3.3 U	NA	3.3 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1 U	1 U	1 U	NA	15	NA	11	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1 U	1 U	1 U	NA	0.71 J	NA	0.80 J	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1 U	1 U	1 U	NA	3.1 J	NA	2.5 J	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	NA	NA	NA	190	NA	200	2.0 U	2.0 U	2.0 U	2.0 UJ
Semivolatile Organics																	
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	NA	NA	2.8 J	NA	5.0 UJ	NA	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	NA	NA	3.6 J	NA	3.9 J	NA	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	0.33 J	5.0 U	0.46 J
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	NA	NA	NA	10 U	NA	10 UJ	NA	10 U	10 U	10 U	10 U
Anthracene	43	43	- -	**43**	43.4	- -	NA	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	NA	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	NA	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	5.0 U	5.0 U	5.0 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	NA	NA	5.0 U	NA	5.0 U	NA	5.0 U	0.20 J	0.25 J	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	NA	NA	5.0 U	NA	5.0 UJ	NA	5.0 U	0.25 J	0.40 J	5.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWD6R 11/05/08 MWD6R-GW-110508	MWW1-02 01/17/02 MWW1-02-GW-N	MWW1-02 11/08/02 MWW102GW110802	MWW1-02 05/19/03 MWW102W(1-11)	MWW1-02 12/10/03 MWW102GW(1-11)	MWW1-02 05/03/04 MWW102GW (050304)	MWW1-02 10/26/04 MWW1-02-GW-102604	MWW1-02 05/11/05 MWW1-02-GW-051105	MWW1-02 11/02/05 MWW1-02-GW-110205FD	MWW1-02 05/17/06 MWW1-02-GW-051706	MWW1-02 11/13/06 MWW1-02-WG-111306
Volatile Organics																	
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	0.16 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	0.41 UJ	0.70 J	10 UJ	10 UJ [10 UJ]	10 U [10 U]	10 UJ [10 UJ]	10 U	10 U [10 U]	10 U [10 U]	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	0.20 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	0.26 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	0.13 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	0.27 J [0.26 J]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	0.13 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	0.11 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	0.16 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	0.22 J [0.25 J]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	0.21 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	0.22 U	0.50 U	0.50 UJ	0.50 U [0.5 U]	0.50 U [0.5 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	0.15 U	0.50 U	0.50 UJ	0.50 U [0.5 U]	0.50 U [0.5 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 UJ	0.34 U	1.0 U	1.0 UJ	1.0 UJ [1 UJ]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	0.12 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	0.12 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	0.15 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 UJ	0.23 U	10 U	10 UJ	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U	10 U [10 U]	10 U [10 U]	10 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	0.13 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	0.23 U	1.0 U	1.0 UJ	1.0 U [1 U]	R [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	0.18 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	0.14 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 UJ [1 UJ]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	0.15 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	1.0 U [1 U]	1.0 U	1.0 U [1 U]	1.0 U [1 U]	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	0.33 U	1.0 U	1.0 UJ	1.0 U [1 U]	1.0 U [1 U]	2.0 U [2 U]	2.0 U	2.0 U [2 U]	2.0 U [2 U]	2.0 U
Semivolatile Organics																	
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	0.85 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	0.64 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	1.1 J	0.80 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U	2.6 U	10 U	10 UJ	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U	10 U [10 U]	10 U [10 U]	10 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U	0.68 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	2.7 U	5.0 U	5.0 UJ	0.40 J [1.3 J]	5.0 U [5 U]	14 J [5 UJ]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 U	0.67 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	0.75 J	1.0 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U	0.75 U	5.0 U	5.0 UJ	5.0 U [5 U]	5.0 U [5 U]	5.0 U [5 U]	5.0 U	5.0 U [5 U]	5.0 U [5 U]	5.0 U

See Notes on last page.

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ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-02 05/03/07 MWW1-02-GW-05-03-07	MWW1-02 11/07/07 MWW1-02-GW-110707	MWW1-02 05/07/08 MWW1-02-GW-050708	MWW1-02 11/06/08 MWW1-02-GW-110608	MWW1-02 11/06/08 MWW1-02-GW-110608R2	MWW1-02 08/21/13 MWW1-02_08212013	MWW1-03 01/17/02 MWW1-03-GW-N	MWW1-03 11/08/02 MWW103GW110802	MWW1-03 05/19/03 MWW103W(1-11)	MWW1-03 12/10/03 MWW103GW(1-11)	MWW1-03 12/10/03 MWW103GW(1-11)R2
Volatile Organics																	
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.16 U	1.0 U	1.0 UJ	1.0 U	NA
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	10 U	10 U	NA	25 U	0.41 U	10 U	10 UJ	10 UJ	NA
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	5.0 U	0.20 U	1.0 U	1.0 UJ	1.0 U	NA
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.26 U	1.0 U	1.0 UJ	1.0 U	NA
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	0.39 J	1.0 U	1.0 U	NA	1.0 U	0.13 U	1.0 U	1.0 UJ	1.0 U	NA
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 UJ	NA	1.0 U	0.13 U	1.0 U	1.0 UJ	1.0 U	NA
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.11 U	1.0 U	1.0 UJ	1.0 U	NA
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.16 U	1.0 U	1.0 UJ	1.0 U	NA
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.21 U	1.0 U	1.0 UJ	1.0 U	NA
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.22 U	0.50 U	0.50 UJ	0.50 U	NA
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.15 U	0.50 U	0.50 UJ	0.50 U	NA
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	5.0 U	0.34 U	1.0 U	1.0 UJ	1.0 UJ	NA
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	1.0 U	1.0 UJ	NA	1.0 U	0.12 U	1.0 U	1.0 UJ	1.0 U	NA
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	5.0 U	0.12 U	1.0 U	1.0 UJ	1.0 U	NA
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 UJ	1.0 UJ	NA	1.0 U	0.15 U	1.0 U	1.0 UJ	1.0 U	NA
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	NA	50 U	0.23 U	10 U	10 UJ	10 U	NA
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	NA	5.0 U	0.13 U	5.0 U	5.0 UJ	5.0 U	NA
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.23 U	1.0 U	1.0 UJ	1.0 U	NA
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.18 U	1.0 U	1.0 UJ	1.0 U	NA
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.14 U	1.0 U	1.0 UJ	1.0 U	NA
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	1.0 UJ	1.0 U	NA	1.0 U	0.15 U	1.0 U	1.0 UJ	1.0 U	NA
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 UJ	2.0 U	NA	2.0 U	0.33 U	1.0 U	1.0 UJ	1.0 U	NA
Semivolatile Organics																	
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	3.4 U	5.0 U	5.0 UJ	NA	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	2.6 U	5.0 U	5.0 UJ	NA	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	3.2 U	5.0 U	5.0 UJ	NA	5.0 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U	10 U	10 U	NA	10 U	0.97 U	10 U	10 U	10 UJ	NA	10 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	2.7 U	5.0 U	5.0 UJ	NA	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	0.70 JB	11 U	5.0 U	5.0 UJ	NA	1.4 J
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	0.73 J	2.7 U	5.0 U	5.0 UJ	NA	5.0 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	4.0 U	5.0 U	5.0 UJ	NA	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	4.9 U	R	5.0 U	5.0 UJ	NA	5.0 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-03 05/03/04 MWW103GW (050304)	MWW1-03 10/26/04 MWW1-03-GW-102604	MWW1-03 10/26/04 MWW1-03-GW-102604DL	MWW1-03 05/11/05 MWW1-03-GW-051105	MWW1-03 11/02/05 MWW1-03-GW-110205FD	MWW1-03 05/17/06 MWW1-03-GW-051706TB	MWW1-03 11/13/06 MWW1-03-WG-111306	MWW1-03 11/13/06 MWW1-03-WG-111306DL	MWW1-03 05/04/07 MWW1-03-GW-050407	MWW1-03 05/04/07 MWW1-03-GW-050407DL
Volatile Organics																
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 UJ	NA	10 U [10 U]	10 U	10 U	NA	50 U [50 U]	NA	50 U [50 U]
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	NA	0.59 J [1 U]	1.1	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	0.50 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.50 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	4.7 J [5.3]	NA	5.0 U [5 U]
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	NA	10 U [10 U]	10 U	10 U	NA	50 U [50 U]	NA	50 U [50 U]
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U	5.0 U	NA	5.0 U [5 U]	5.0 U	5.0 U	NA	25 U [25 U]	NA	25 U [25 U]
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	R	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 UJ	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	1.0 U	NA	1.0 U [1 U]	1.0 U	1.0 U	NA	5.0 U [5 U]	NA	5.0 U [5 U]
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U	2.0 U	NA	2.0 U [2 U]	2.0 U	2.0 U	NA	10 U [10 U]	NA	10 U [10 U]
Semivolatile Organics																
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U	NA	40 U	10 U [10 U]	10 U	10 U	10 U [10 U]	NA	10 U [10 U]	NA
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	1.3 J	5.0 U [5 U]	NA	5.0 U [5 U]	NA
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 U	NA	20 U	0.45 J [0.53 J]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U	NA	20 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U [5 U]	NA	5.0 U [5 U]	NA

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW1-03 11/07/07 MWW1-03-GW-110707	MWW1-03 05/07/08 MWW1-03-GW-050708	MWW1-03 11/06/08 MWW1-03-GW-110608	MWW1-03 11/06/08 MWW1-03-GW-110608R2	MWW1-03 08/21/13 MWW1-03_08212013
Volatile Organics											
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U [20 U]	10 U [10 U]	0.63 J [0.71 J]	NA	25 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	5.0 U
Chloroethane	430	1,700	1,100	**5,700,000**	5,740,000	110,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 UJ [1 UJ]	NA	1.0 U
1,2-Dichlorobenzene	600	600	13	**160,000**	156,000	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
1,2-Dichloroethane	5	5	360	**59,000**	8,520,000	2,500,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	5.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U [2 U]	1.0 U [1 U]	1.0 UJ [1 UJ]	NA	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	5.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 UJ [1 UJ]	NA	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U [20 U]	10 U [10 U]	10 U [10 U]	NA	50 U
Methyl tert-butyl ether	40	40	7,100	**47,000,000**	46,800,000	- -	5.0 U [10 U]	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U [2 U]	1.0 U [1 U]	1.0 U [1 U]	NA	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U [4 U]	2.0 UJ [2 UJ]	2.0 U [2 U]	NA	2.0 U
Semivolatile Organics											
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U
Acetophenone	1,500	4,400	- -	**6,100,000**	6,100,000	- -	10 U [10 U]	10 U [10 U]	NA	10 U	0.97 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U [0.21 J]	5.0 U [5 U]	NA	5.0 U	4.9 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	0.58 JB
Di-n-Butylphthalate	880	2,500	9.7	**- -**	11,200	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U [5 U]	5.0 U [5 U]	NA	5.0 U	4.9 U

See Notes on last page.

Table 4-21 W-01 Groundwater VOC-SVOC
RACER - Pontiac North Campus

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

B	Result exceeds the method detection limit and/or reporting limit in the method blank.
DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-28 W-08 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-01 09/11/01 MWW8-01-GW(16-26)	MWW8-01 01/09/02 MWW8-01-GW	MWW8-02 09/11/01 MWW8-02-GW(13-23)	MWW8-02 01/09/02 MWW8-02-GW	MWW8-04 09/17/01 MWW8-04-GW(26-36)	MWW8-04 01/09/02 MWW8-04-GW	MWW8-05 09/12/01 MWW8-05-GW(7-17)	MWW8-05 01/09/02 MWW8-05-GW
Detected Inorganics														
Arsenic	10	10	10	- -	- -	- -	10.0 U	10.0 U	7.5 J	14.7	18.6	18.6	36.0	28.9
Barium	2,000	2,000	670	- -	- -	- -	91.3	101	94.6	101	77.6	42.9	68.9	60.7
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	0.34 J	5.0 U	0.32 J	5.0 U	5.0 U	0.34 J	0.54 J
Chromium	100	100	11	- -	- -	- -	10.0 U	1.6 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	3.2 J	3.0 J	20.0 U	20.0 U	1.9 J	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iron	0.3	0.3	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	400,000	1,100,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	50	1,300	- -	- -	- -	699	901	167	153	561	254	3,200	3,040
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.070 J
Nickel	100	100	73	- -	- -	- -	6.3 J	4.0 J	3.6 J	3.4 J	4.1 J	20.0 U	20.0 U	20.0 U
Thallium	2	2	3.7	- -	- -	- -	10.0 U	1.0 U	10.0 U	1.0 U	6.1 J	1.0 U	10.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	1.8 J	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	33.8	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered														
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic (dissolved)	10	10	10	- -	- -	- -	10.0 U	10.0 U	6.8 J	13.0	19.1	15.5	34.1	28.0
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	88.2	105	81.4	101	80.0	41.3	65.2	59.5
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	5.0 U	0.30 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.55 J
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U	5.0 J	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U
Cobalt (dissolved)	40	100	100	- -	- -	- -	3.2 J	2.8 J	20.0 U	20.0 U	1.7 J	20.0 U	20.0 U	20.0 U
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	676	981	142	153	587	253	3,240	2,990
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.19 J
Nickel (dissolved)	100	100	73	- -	- -	- -	6.6 J	4.8 J	2.9 J	3.0 J	3.5 J	20.0 U	20.0 U	20.0 U
Thallium (dissolved)	2	2	3.7	- -	- -	- -	10.0 U	0.021 J	10.0 U	1.0 U	10.0 U	1.0 U	10.0 U	1.0 U
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	10.0 U	1.1 J	10.0 U	10.0 U	10.0 U
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	32.1	20.0 U

See Notes on last page.

Table 4-28 W-08 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-08 02/15/02 MWW8-08-GW	MWW8-08 11/14/02 MWW8-08-GW02	MWW8-10 02/12/02 MWW8-10-GW	MWW8-10 11/12/02 MWW8-10-GW02	MWW8-11 02/11/02 MWW8-11-GW	MWW8-11 11/12/02 MWW8-11-GW02	MWW8-12 02/13/02 MWW8-12-GW	MWW8-12 11/12/02 MWW8-12-GW02	MWW8-13 08/25/03 MWW813GW(19-29)
Detected Inorganics															
Arsenic	10	10	10	- -	- -	- -	28.7	84.9	10.0 U [10 U]	9.2 J	19.4	35.1	4.1 J	6.3 J	18.8
Barium	2,000	2,000	670	- -	- -	- -	460	1,030	303 [306]	382	26.5	45.8	205	31.9	10.0 U
Beryllium	4	4	6.7	- -	- -	- -	0.62 J	5.4	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cadmium	5	5	2.5	- -	- -	- -	1.1 J	3.9 J	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	60.7	295	1.6 J [10 U]	10.0 U	10.0 U	5.0 J	47.6	10.0 U	10.0 U
Cobalt	40	100	100	- -	- -	- -	27.5	87.9	9.9 J [9.5 J]	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Copper	1,000	1,000	13	- -	- -	- -	55.6	214	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	6.6	5.0 U	5.0 U
Iron	0.3	0.3	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	4	4	14	- -	- -	- -	36.0	122	3.0 U [3 U]	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Magnesium	400,000	1,100,000	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese	50	50	1,300	- -	- -	- -	1,840 J	5,410	326 [328]	167	2,920 J	3,570	55.1	3.5 J	48.5 J
Mercury	2	2	0.0013	**56**	56	- -	0.26	0.15 J	0.20 U [0.2 U]	0.20 U	0.15 J	0.20 U	0.20 U	0.20 U	0.11 J
Nickel	100	100	73	- -	- -	- -	74.5 J	307	17.9 J [17.4 J]	16.9 J	5.9 J	7.0 J	7.5 J	16.4 J	31.5
Thallium	2	2	3.7	- -	- -	- -	1.0	3.0	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	80.2	239	0.93 J [10 U]	10.0 U	10.0 U	10.0 U	3.6 J	11.9 J	6.5 J
Zinc	2,400	5,000	170	- -	- -	- -	169 J	631	20.0 U [20 U]	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	25.0 U	NA	25.0 U [25 U]	NA	25.0 U	NA	2.5 J	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	6.1 J	NA	10.0 U [10 U]	NA	21.2	NA	4.8 J	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	241	NA	307 [295]	NA	26.0	NA	160	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	5.0 U	NA	5.0 U [5 U]	NA	5.0 U	NA	5.0 U	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	10.0 U	NA	10.0 U [10 U]	NA	10.0 U	NA	47.6	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	1.4 J	NA	9.5 J [9.1 J]	NA	20.0 U	NA	20.0 U	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	5.0 U	NA	5.0 U [5 U]	NA	5.0 U	NA	5.2	NA	NA
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	435 J	NA	327 [313]	NA	2,920 J	NA	2.1 J	NA	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	0.20 U	NA	0.20 U [0.2 U]	NA	0.11 J	NA	0.20 U	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	6.3 J	NA	15.9 J [15.2 J]	NA	6.1 J	NA	8.1 J	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	0.031 J	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	10.0 U	NA	0.87 J [10 U]	NA	10.0 U	NA	3.8 J	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	20.0 U	NA	39.0 [20 U]	NA	20.0 U	NA	20.0 U	NA	NA

See Notes on last page.

Table 4-28 W-08 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-13 12/17/03 MWW813GW(17-27)	MWW8-45 05/25/17 MWW8-45_GW-052517	MWW8-45 08/23/17 MWW8-45_GW-082317
Detected Inorganics									
Arsenic	10	10	10	- -	- -	- -	21.4	NA	NA
Barium	2,000	2,000	670	- -	- -	- -	10.9	NA	NA
Beryllium	4	4	6.7	- -	- -	- -	1.0 U	NA	NA
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	NA	NA
Chromium	100	100	11	- -	- -	- -	10.0 U	NA	NA
Cobalt	40	100	100	- -	- -	- -	20.0 U	NA	NA
Copper	1,000	1,000	13	- -	- -	- -	6.4 U	NA	NA
Iron	0.3	0.3	- -	- -	- -	- -	NA	19,500 [19,700]	13,700 [13,500]
Lead	4	4	14	- -	- -	- -	3.0 U	NA	NA
Magnesium	400,000	1,100,000	- -	- -	- -	- -	NA	32,600 [32,400]	NA
Manganese	50	50	1,300	- -	- -	- -	10.0 U	490 [514]	NA
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	NA	NA
Nickel	100	100	73	- -	- -	- -	30.1	NA	NA
Thallium	2	2	3.7	- -	- -	- -	1.0 U	NA	NA
Vanadium	4.5	62	27	- -	- -	- -	6.6 J	NA	NA
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	NA	NA
Detected Inorganics-Filtered									
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA
Iron (dissolved)	300	300	- -	- -	- -	- -	NA	18,900 [18,900]	11,800 [11,900]
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	479 [485]	NA
Mercury (dissolved)	2	2	0.0013	**56**	56	- -	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA

See Notes on last page.

Table 4-28 W-08 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-28 W-08 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW8-08 02/15/02 MWW8-08-GW-02/15/02	MWW8-10 02/12/02 MWW8-10-GW-021202	MWW8-11 02/11/02 MWW8-11-GW-021102	MWW8-12 02/13/02 MWW8-12-GW-021302	MWW8-45 05/25/17 MWW8-45_GW-052517
Detected Miscellaneous												
Alkalinity, total (as CaCO3)	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	558 [514]
Hardness	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	544 [529]
Total Dissolved Solids	500	500	500	- -	- -	- -	mg/L	NA	NA	NA	NA	752 [764]
Total Suspended Solids	- -	- -	- -	- -	- -	- -	mg/L	NA	NA	NA	NA	19 [19]
Detected Dioxins/Furans												
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	- -	- -	- -	- -	- -	- -	pg/L	212	2.0 U	2.8 U	2.6 U	NA
1,2,3,4,6,7,8-HpCDD	- -	- -	- -	- -	- -	- -	pg/L	55.2 U	3.1 J	1.9 U	1.6 UJ	NA
1,2,3,4,6,7,8-HpCDF	- -	- -	- -	- -	- -	- -	pg/L	32.6 U	1.9 J	1.1 UJ	0.9 U	NA
1,2,3,4,7,8-HxCDD	- -	- -	- -	- -	- -	- -	pg/L	24.7 U	0.9 U	3.3 J	1.0 U	NA
1,2,3,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	16.9 U	1.7 J	0.8 U	0.8 U	NA
1,2,3,7,8,9-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	21.3 U	1.6 J	1.0 U	0.9 U	NA
2,3,4,6,7,8-HxCDF	- -	- -	- -	- -	- -	- -	pg/L	17.8 U	1.1 J	0.8 UJ	0.8 U	NA
2,3,7,8-TCDD	30	30	10	- -	19,000	- -	pg/L	8.7 U	1.3 J	1.5 U	1.1 J	NA
Total heptachlorodibenzofuran (HpCDF)	- -	- -	- -	- -	- -	- -	pg/L	36.3 U	3.9 J	6.3 J	1.0 U	NA
Total heptachlorodibenzo-p-dioxin (HpCDD)	- -	- -	- -	- -	- -	- -	pg/L	55.2 U	5.6 J	5.6	6.8 J	NA
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	pg/L	17.7 U	6.3 J	14.5 J	2.0	NA
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	pg/L	25.5 U	6.1 J	18.4 J	9.4 J	NA
Total pentachlorodibenzofuran (PeCDF)	- -	- -	- -	- -	- -	- -	pg/L	10.1 U	0.6 U	6.7 J	3.8 J	NA
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	pg/L	16.0 U	6.1	4.3 J	4.7 J	NA
Total tetrachlorodibenzofuran (TCDF)	- -	- -	- -	- -	- -	- -	pg/L	7.0 U	0.6 U	2.3 J	2.5 J	NA
Total tetrachlorodibenzo-p-dioxin (TCDD)	- -	- -	- -	- -	- -	- -	pg/L	8.7 U	3.0 J	1.5 U	1.1 J	NA

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
mg/L	milligram per liter
NA	Not applicable
pg/L	picograms per liter
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-28 W-08 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-01 09/11/01 MWW8-01-GW(16-26)	MWW8-01 01/09/02 MWW8-01-GW	MWW8-02 09/11/01 MWW8-02-GW(13-23)	MWW8-02 01/09/02 MWW8-02-GW	MWW8-04 09/17/01 MWW8-04-GW(26-36)	MWW8-04 01/09/02 MWW8-04-GW	MWW8-05 09/12/01 MWW8-05-GW(7-17)	MWW8-05 01/09/02 MWW8-05-GW	MWW8-08 02/15/02 MWW8-08-GW	MWW8-08 11/14/02 MWW8-08-GW02
Detected PCBs																
Aroclor-1232	0.5	0.5	0.2	**45**	- -	- -	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U

See Notes on last page.

Table 4-28 W-08 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-10 02/12/02 MWW8-10-GW	MWW8-10 11/12/02 MWW8-10-GW02	MWW8-11 02/11/02 MWW8-11-GW	MWW8-11 11/12/02 MWW8-11-GW02	MWW8-12 02/13/02 MWW8-12-GW	MWW8-12 11/12/02 MWW8-12-GW02	MWW8-13 08/25/03 MWW813GW(19-29)	MWW8-13 12/17/03 MWW813GW(17-27)
Detected PCBs														
Aroclor-1232	0.5	0.5	0.2	**45**	- -	- -	1.3 J [0.4 UJ]	0.40 UJ	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	R
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	1.3 J [0.4 U]	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.2 U

See Notes on last page.

Table 4-28 W-08 Groundwater PCB
RACER - Pontiac North Campus

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
PCBs	Polychlorinated Biphenyls
R	Rejected data
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-28 W-08 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-01 09/11/01 MWW8-01-GW(16-26)	MWW8-01 01/09/02 MWW8-01-GW	MWW8-02 09/11/01 MWW8-02-GW(13-23)	MWW8-02 01/09/02 MWW8-02-GW	MWW8-02 01/09/02 MWW8-02-GWDL	MWW8-04 09/17/01 MWW8-04-GW(26-36)	MWW8-04 01/09/02 MWW8-04-GW	MWW8-05 09/12/01 MWW8-05-GW(7-17)	MWW8-05 01/09/02 MWW8-05-GW	MWW8-08 02/15/02 MWW8-08-GW
Detected Volatile Organics																
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 U	10 U	10 U	NA	1.8 J	10 U	10 U	10 U	24 J
Benzene	5	5	200	**35,000**	1,750,000	68,000	0.18 J	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	0.23 J	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	10 U	0.84 J	10 U	NA	10 U	0.54 J	10 U	10 U	10 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.70 J	1.0 U	1.0 U	0.40 J
Chloroform	80	80	350	**180,000**	7,920,000	- -	0.23 J	1.0 U	1.0 U	1.0 U	NA	0.23 J	1.0 U	0.14 J	1.0 U	1.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	0.26 J	1.0 U	1.0 U	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	3.0	1.0 U	0.21 J	0.27 J	NA	1.0 U	1.0 U	0.22 J	0.20 J	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	2.3	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.63	0.50 U	0.50 U	0.50 U	NA	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.50 J	1.0 U	1.0 U	1.0 U	R
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	1.0 U	0.15 J	1.0 U	NA	0.22 J	0.16 J	1.0 U	1.0 U	0.25 J
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	0.42 J	0.18 J	NA	1.7	0.76 J	0.26 J	0.18 J	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	0.19 J
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	0.43 J	10 U	NA	1.0 J	10 U	10 U	10 U	1.7 J
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.75 J	0.28 J	0.20 J	1.0 U	1.0
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	2.6	0.20 J	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	0.31 J	1.0 UJ	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U	1.0 U	0.77 J	1.0 U	NA	0.89 J	0.62 J	0.51 J	1.0 U	2.1
Detected Semivolatile Organics																
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.1	1.7 J	3.7 J	0.65 J	5.0 U
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Anthracene	43	43	- -	**43**	43.4	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	0.79 J
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	10 U	10 U	10 U	NA	25 U	10 U	10 U	10 U	10 U	10 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	5.0 U	5.0 U	4.7 J	NA	12 U	2.5 J	1.5 J	3.5 J	5.0 U	3.5 J
Phenanthrene	52	150	2	**1,000**	1,000	- -	5.0 U	5.0 U	2.3 J	NA	12 U	3.9 J	1.1 J	1.4 J	1.0 J	1.5 J
Phenol	4,400	13,000	450	**- -**	82,800,000	- -	5.0 U	5.0 U	5.0 U	NA	12 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Naphthalene	520	1,500	11	**31,000**	31,000	- -	5.0 U	5.0 U	1.7 J	NA	12 U	2.6 J	1.9 J	1.9 J	5.0 U	5.0 U

See Notes on last page.

Table 4-28 W-08 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-08 11/14/02 MWW8-08-GW02	MWW8-08 11/14/02 MWW8-08-GWDL	MWW8-08 11/14/02 MWW8-08-GWDLR2	MWW8-10 02/12/02 MWW8-10-GW	MWW8-10 02/12/02 MWW8-10-GWDLR2	MWW8-10 11/12/02 MWW8-10-GW02	MWW8-10 11/12/02 MWW8-10-GWDL	MWW8-11 02/11/02 MWW8-11-GW	MWW8-11 02/11/02 MWW8-11-GWR2	MWW8-11 11/12/02 MWW8-11-GW02	MWW8-12 02/13/02 MWW8-12-GW
Detected Volatile Organics																	
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	NA	NA	10 UJ [3 J]	NA	10 UJ	NA	10 U	NA	10 UJ	29
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	NA	NA	0.60 J [0.65 J]	NA	0.41 J	NA	0.50 J	NA	1.0 U	0.26 J
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	NA	NA	10 UJ [10 UJ]	NA	10 UJ	NA	10 U	NA	10 UJ	4.4 J
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	0.25 J	NA	NA	0.39 J [0.35 J]	NA	0.45 J	NA	1.0 U	NA	1.0 U	0.24 J
Chloroform	80	80	350	**180,000**	7,920,000	- -	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	0.24 J
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	0.50 U	NA	NA	0.50 UJ [0.5 UJ]	NA	0.50 U	NA	0.50 U	NA	0.50 U	0.30 J
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	0.50 U	NA	NA	0.50 U [0.5 U]	NA	0.50 U	NA	0.50 U	NA	0.50 U	0.50 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	R	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	1.0 U	NA	NA	0.34 J [0.43 J]	NA	1.0 U	NA	0.42 J	NA	1.0 U	0.32 J
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 UJ	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	NA	NA	0.60 J [0.52 J]	NA	0.69 J	NA	10 U	NA	10 U	0.50 J
Styrene	100	100	80	**310,000**	310,000	140,000	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	NA	NA	1.9 [2.1]	NA	0.66 J	NA	1.8	NA	1.0 U	0.86 J
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	1.0 U	NA	NA	1.0 U [1 U]	NA	1.0 U	NA	1.0 U	NA	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U	NA	NA	2.4 [2.9]	NA	1.0 U	NA	2.2	NA	1.0 U	1.3
Detected Semivolatile Organics																	
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	2.2 J	3.1 J	NA
Anthracene	43	43	- -	**43**	43.4	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	0.73 J	5.0 U	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	NA	NA	5,500	NA	100 U	NA	50 U	NA	10 U	10 U	NA
Fluorene	880	2,000	12	**2,000**	1,980	- -	NA	100 U	NA	NA	21 J	NA	25 U	NA	13	17	NA
Phenanthrene	52	150	2	**1,000**	1,000	- -	NA	28 J	NA	NA	50 U	NA	4.4 J	NA	3.6 J	5.0 U	NA
Phenol	4,400	13,000	450	**- -**	82,800,000	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA
Naphthalene	520	1,500	11	**31,000**	31,000	- -	NA	100 U	NA	NA	50 U	NA	25 U	NA	5.0 U	5.0 U	NA

See Notes on last page.

Table 4-28 W-08 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW8-12 02/13/02 MWW8-12-GWDL	MWW8-12 11/12/02 MWW8-12-GW02	MWW8-12 11/12/02 MWW8-12-GWDL02	MWW8-13 08/25/03 MWW813GW(19-29)	MWW8-13 08/25/03 MWW813GW(19-29)DL	MWW8-13 12/17/03 MWW813GW(17-27)DL
Detected Volatile Organics												
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	NA	10 UJ	NA	10 U	NA	16 J
Benzene	5	5	200	**35,000**	1,750,000	68,000	NA	1.0 U	NA	0.47 J	NA	4.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	NA	10 UJ	NA	10 UJ	NA	40 U
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	NA	0.32 J	NA	1.1	NA	4.2
Chloroform	80	80	350	**180,000**	7,920,000	- -	NA	1.0 U	NA	1.0 U	NA	4.0 U
Chloromethane	260	1,100	- -	**45,000**	6,340,000	36,000	NA	1.0 U	NA	1.0 U	NA	4.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	NA	1.0 U	NA	1.0 U	NA	4.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	NA	1.0 U	NA	1.0 U	NA	4.0 U
cis-1,2-Dichloroethene	70	70	620	**210,000**	3,500,000	530,000	NA	0.50 U	NA	0.50 U	NA	2.0 U
trans-1,2-Dichloroethene	100	100	1,500	**200,000**	6,300,000	230,000	NA	0.50 U	NA	0.50 U	NA	2.0 U
Dichloromethane	5	5	1,500	**1,400,000**	17,000,000	- -	NA	1.0 U	NA	1.0 UJ	NA	4.0 U
Ethylbenzene	74	74	18	**170,000**	169,000	43,000	NA	1.0 U	NA	0.70 J	NA	0.81 J
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	NA	1.0 U	NA	1.0 U	NA	4.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	NA	1.0 U	NA	1.0 U	NA	4.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	NA	2.5 J	NA	4.9 J	NA	2.5 J
Styrene	100	100	80	**310,000**	310,000	140,000	NA	1.0 U	NA	1.0 U	NA	4.7
Toluene	790	790	270	**530,000**	526,000	61,000	NA	1.0 U	NA	2.0	NA	2.3 J
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	NA	1.0 U	NA	1.0 U	NA	4.0 U
Vinyl Chloride	2	2	13	**13,000**	2,760,000	33,000	NA	1.0 U	NA	1.0 UJ	NA	4.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	1.0 U	NA	2.8	NA	2.8 J
Detected Semivolatile Organics												
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	50 U	NA	50 U	NA	2,500	5,800
2-Methylnaphthalene	260	750	19	**25,000**	24,600	- -	50 U	NA	50 U	NA	1,000 U	2,000 U
2-Methylphenol	- -	- -	- -	**- -**	- -	- -	50 U	NA	50 U	NA	1,000 U	360 J
4-Methylphenol	- -	- -	- -	**- -**	- -	- -	50 U	NA	50 U	NA	4,600 J	9,500 #
Acenaphthene	1,300	3,800	38	**4,200**	4,240	- -	50 U	NA	50 U	NA	1,000 U	2,000 U
Anthracene	43	43	- -	**43**	43.4	- -	50 U	NA	50 U	NA	1,000 U	2,000 U
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	100 U	NA	100 U	NA	2,000 U	4,000 U
Fluorene	880	2,000	12	**2,000**	1,980	- -	50 U	NA	50 U	NA	1,000 U	2,000 U
Phenanthrene	52	150	2	**1,000**	1,000	- -	50 U	NA	50 U	NA	1,000 U	2,000 U
Phenol	4,400	13,000	450	**- -**	82,800,000	- -	50 U	NA	46 J	NA	1,200	2,700
Naphthalene	520	1,500	11	**31,000**	31,000	- -	50 U	NA	50 U	NA	1,000 U	2,000 U

See Notes on last page.

Table 4-28 W-08 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
R	Rejected data
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-30 W-09 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD11R 05/04/07 GWD11R-GW-05-04-07	GWD11R 11/09/07 GWD11R-GW-110907	GWD11R 05/08/08 GWD-11R-GW-050808	GWD11R 05/08/08 GWD-11R-GW-050808R2	GWD11R 11/06/08 GWD11R-GW-110608	MWD3 08/27/01 MWD3-GW(8-18)-N	MWD3 01/08/02 MWD3-GW	MWD5 08/27/01 MWD5-GW(21-31)-N	MWD5 01/08/02 MWD5-GW	MWW9-01 08/25/03 MWW901GW(22-32)
Detected Inorganics																
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U	25.0 U	NA	25.0 U [25 U]	4.8 J	7.9 J	2.2 U	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	6.9	7.4	20.9	NA	18.5 [18.7]	3.9 U	4.7 J	3.9 U	10.0 U	3.7 J
Barium	2,000	2,000	670	- -	- -	- -	97.4	88.3	123 J	NA	117 J [116 J]	77.2	52.7	201	56.1	420
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U [5 U]	0.29 J	5.0 U	0.28 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	5.4 J	21.7	6.2 J	NA	10.0 U [2.3 J]	1.4 U	10.0 U	1.4 U	11.2	56.8
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U	4.4 J	NA	20.0 U [20 U]	1.3 U	20.0 U	2.9 J	20.0 U	2.7 J
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U [5 U]	4.2 U	5.0 U	4.2 U	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U	3.0 U	NA	3.0 U [3 U]	2.5 U	5.7	2.5 U	3.0 U	39.1
Manganese	50	50	1,300	- -	- -	- -	36.6	35.1	26.0 J	NA	25.7 J [25.8 J]	162	24.7	382	16.5	187 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	NA	0.20 U	0.20 U [0.2 U]	0.069 U	0.20 U	0.069 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	3.8 J	27.8	20.0 U	NA	20.0 U [20 U]	2.2 U	20.0 U	3.8 J	20.0 U	38.5
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	NA	1.0 U [1 U]	5.0 U	1.0 U	12.4	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U	10.0 U	NA	10.0 U [10 U]	0.82 U	2.0 J	0.82 U	10.0 U	1.9 J
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	8.4 J	20.0 U	NA	20.0 U [20 U]	12.0 U	20.0 U	12.0 U	20.0 U	54.4
Detected Inorganics-Filtered																
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	4.6 J	8.0 J	2.2 U	25.0 U	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	3.9 U	4.1 J	3.9 U	10.0 U	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	74.1	50.5	147	54.0	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	0.28 J	5.0 U	0.28 U	5.0 U	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	1.4 U	10.0 U	1.4 U	10.4	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	1.3 U	20.0 U	1.4 J	20.0 U	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	NA	NA	4.2 U	4.4 J	4.2 U	5.0 U	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	144	20.4	242	19.8	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	2.3 J	2.7 J	2.2 J	20.0 U	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	7.4 J	1.0 U	5.3 J	0.038 J	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	0.82 U	2.3 J	0.82 U	10.0 U	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	12.0 U	20.0 U	12.0 U	20.0 U	NA

See Notes on last page.

Table 4-30 W-09 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 05/24/04 MWW901GW052404	MWW9-01 11/01/04 MWW9-01-GW-110104TB	MWW9-01 11/04/05 MWW9-01-GW-110405	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808
Detected Inorganics															
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U	25.0 U
Arsenic	10	10	10	- -	- -	- -	10.0 U	4.1 J	10.0 U	22.8	5.3	5.1	3.0	9.5	6.2
Barium	2,000	2,000	670	- -	- -	- -	319	246	10.0 U	316	81.1	174	86.5	215 J	192 J
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	0.31 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	15.5	6.7 J	10.0 U	36.8	6.4 J	10.0 U	6.2 J	7.4 J	10.0 U
Cobalt	40	100	100	- -	- -	- -	1.3 J	20.0 U	20.0 U	3.3 J	1.3 J	9.3 J	20.0 U	20.0 U	7.2 J
Copper	1,000	1,000	13	- -	- -	- -	14.6 U	2.6 J	5.0 U	18.8	6.8	5.0 U	1.9 J	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	64.0	4.0	3.0 U	78.4	8.0	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	167 J	147 J	10.0 U	336	180 J	71.6 J	20.7	143 J	74.7 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.039 J	0.11 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	11.2 J	5.0 J	20.0 U	28.7	5.1 J	2.7 J	5.2 J	4.5 J	20.0 U
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vanadium	4.5	62	27	- -	- -	- -	2.3 J	10.0 U	10.0 U	12.8	2.3 J	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	39.6	20.0 U	20.0 U	43.3	22.2	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered															
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	25.0 U	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	3.1 J	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	232	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	20.0 U	NA	NA	NA	NA	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	5.0 U	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	156 J	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	3.9 J	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	10.0 U	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	15.4 J	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-30 W-09 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-03 09/30/03 MWW9-03-GW	MWW9-03 12/17/03 MWW903GW(18-28)	MWW9-05 12/17/03 MWW905GW(23-33)FD	MWW9-06 09/30/03 MWW9-06-GW	MWW9-06 12/17/03 MWW906GW(23-33)	MWW9-07 12/17/03 MWW907GW(13-23)FD	TWW9-01 09/30/03 TWW9-01-GW
Detected Inorganics													
Antimony	6	6	130	- -	- -	- -	25.0 U	25.0 U [25 U]	25.0 U	25.0 U	25.0 U	23.8 J	25.0 U [25 U]
Arsenic	10	10	10	- -	- -	- -	15.4	13.4 [13.8]	10.0 U	10.0 U	3.4 J	10.0 U	11.0 [10.2]
Barium	2,000	2,000	670	- -	- -	- -	17.3	27.7 [31]	77.6	107	156	55.0	161 [173]
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U [5 U]	0.88 J	5.0 U	5.0 U	5.0 U	5.0 U [5 U]
Chromium	100	100	11	- -	- -	- -	10.0 U	10.0 U [10 U]	10.0 U	10.0 U	10.0 U	10.0 U	10.0 U [10 U]
Cobalt	40	100	100	- -	- -	- -	20.0 U	20.0 U [20 U]	1.1 J	20.0 U	20.0 U	20.0 U	2.3 J [2.4 J]
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	5.2 U [5.9 U]	8.3 U	5.0 U	6.3 U	6.7 U	2.6 J [3 J]
Lead	4	4	14	- -	- -	- -	3.0 U	3.0 U [3 U]	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U [3 U]
Manganese	50	50	1,300	- -	- -	- -	670	530 J [579 J]	902 J	663	674 J	418 J	66.6 [54.3]
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.20 U	0.072 J [0.1 J]
Nickel	100	100	73	- -	- -	- -	20.0 U	20.0 U [20 U]	3.7 J	20.0 U	20.0 U	13.8 J	4.9 J [5.7 J]
Thallium	2	2	3.7	- -	- -	- -	1.0 U	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]
Vanadium	4.5	62	27	- -	- -	- -	10.0 U	10.0 U [10 U]	10.0 U	10.0 U	10.0 U	10.0 U	4.2 J [4.8 J]
Zinc	2,400	5,000	170	- -	- -	- -	20.0 U	20.0 U [20 U]	20.0 U	20.0 U	20.0 U	20.0 U	20.0 U [20 U]
Detected Inorganics-Filtered													
Antimony (dissolved)	6	6	130	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Cadmium (dissolved)	5	5	2.5	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Cobalt (dissolved)	40	100	100	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Copper (dissolved)	1,000	1,000	13	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Thallium (dissolved)	2	2	3.7	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	NA	NA	NA	NA	NA

See Notes on last page.

Table 4-30 W-09 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-30 W-09 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD11R 05/04/07 GWD11R-GW-05-04-07	GWD11R 11/09/07 GWD11R-GW-110907	GWD11R 03/13/08 GWD11R-GW-031308	GWD11R 05/08/08 GWD-11R-GW-050808	GWD11R 11/06/08 GWD11R-GW-110608	MWD3 08/27/01 MWD3-GW(8-18)-N	MWD3 01/08/02 MWD3-GW	MWD5 08/27/01 MWD5-GW(21-31)-N	MWD5 01/08/02 MWD5-GW	MWW9-01 08/25/03 MWW901GW(22-32)	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 11/04/05 MWW9-01-GW-110405
Detected PCBs																		
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.050 J	0.20 U	0.20 U	0.20 U [0.2 U]	0.044 U	0.20 U	0.044 U	0.20 U	0.20 UJ	0.20 U	0.20 U
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.05 J	0.4 U	0.4 U	0.4 U [0.4 U]	0.11 U	0.4 U	0.11 U	0.4 U	0.4 U	0.4 U	0.4 U

See Notes on last page.

Table 4-30 W-09 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808	MWW9-03 09/30/03 MWW9-03-GW	MWW9-03 12/17/03 MWW903GW(18-28)	MWW9-05 12/17/03 MWW905GW(23-33)FD	MWW9-06 09/30/03 MWW9-06-GW	MWW9-06 12/17/03 MWW906GW(23-33)	MWW9-07 12/17/03 MWW907GW(13-23)FD	TWW9-01 09/30/03 TWW9-01-GW
Detected PCBs																		
Aroclor-1260	0.5	0.5	0.2	**45**	- -	- -	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U [0.2 U]	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U [0.2 U]
Total PCBs	0.5	0.5	0.2	**- -**	44.7	- -	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U [0.4 U]	0.4 U	0.4 U	0.4 U	0.4 U	0.4 U [0.4 U]

See Notes on last page.

Table 4-30 W-09 Groundwater PCB
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-30 W-09 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	GWD11R 05/04/07 GWD11R-GW-05-04-07	GWD11R 11/09/07 GWD11R-GW-110907	GWD11R 05/08/08 GWD-11R-GW-050808	GWD11R 11/06/08 GWD11R-GW-110608	GWD11R 11/06/08 GWD11R-GW-110608R2	MWD3 08/27/01 MWD3-GW(8-18)-N	MWD3 01/08/02 MWD3-GW	MWD5 08/27/01 MWD5-GW(21-31)-N	MWD5 01/08/02 MWD5-GW
Detected Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	10 U	10 U	10 U [1.3 J]	NA	160	14 J	35	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.64 U	1.0 U	0.16 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 U	2.0 J	10 U	10 U [10 U]	NA	1.6 U	10 UJ	0.41 U	10 UJ
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	0.99 J	1.0 U	0.77 J [0.43 J]	NA	0.80 U	1.0 U	0.20 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 UJ [1 UJ]	NA	1.1 U	1.0 UJ	0.95 J	2.2 J
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 UJ	1.0 UJ [1 UJ]	NA	0.52 U	1.0 U	0.13 U	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	1.0 U	1.0 UJ	1.0 U [1 U]	NA	0.64 U	0.19 J	0.16 U	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.48 U	1.0 U	0.12 U	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 UJ [1 UJ]	NA	0.60 U	1.0 U	0.15 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U [10 U]	NA	0.92 U	10 UJ	0.23 U	10 UJ
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.92 U	0.89 J	0.23 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.72 U	1.0 U	0.18 U	1.0 U
1,1,1-Trichloroethane	200	200	89	**1,300,000**	1,330,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.60 U	1.0 U	0.15 U	0.25 J
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA	0.56 U	1.0 U	0.14 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	2.0 U	2.0 U	2.0 UJ	2.0 U [2 U]	NA	1.3 U	1.0 U	0.33 U	1.0 U
Detected Semivolatile Organics															
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	0.85 U	5.0 U	0.85 U	5.0 U
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	NA	5.0 U	2.7 U	5.0 U	2.7 U	5.0 U
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	10 U	10 U	10 U	NA	10 UJ	2.5 U	10 U	2.5 U	10 U

See Notes on last page.

Table 4-30 W-09 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-01 08/25/03 MWW901GW(22-32)	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 11/04/05 MWW9-01-GW-110405	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808	MWW9-03 09/30/03 MWW9-03-GW
Detected Volatile Organics															
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	0.90 J	10 UJ	10 U	10 U	2.0 J	10 U	4.4 J	10 UJ
Benzene	5	5	200	**35,000**	1,750,000	68,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 U	0.71 J	10 UJ
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	R
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,1-Trichloroethane	200	200	89	**1,300,000**	1,330,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Total Xylenes	280	280	49	**190,000**	186,000	70,000	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 UJ	1.0 U
Detected Semivolatile Organics															
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	NA
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	10 U	1.4 J	10 U	10 U	10 U	10 U	10 U	10 U	NA

See Notes on last page.

Table 4-30 W-09 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-03 09/30/03 MWW9-03-GWDL	MWW9-03 12/17/03 MWW903GW(18-28)	MWW9-05 12/17/03 MWW905GW(23-33)FD	MWW9-06 09/30/03 MWW9-06-GW	MWW9-06 12/17/03 MWW906GW(23-33)	MWW9-07 12/17/03 MWW907GW(13-23)FD	TWW9-01 09/30/03 TWW9-01-GW	TWW9-01 09/30/03 TWW9-01-GWDL
Detected Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	NA	0.81 J [1.1 J]	1.2 J	10 UJ	1.5 J	10 UJ	16 J [14 J]	NA
Benzene	5	5	200	**35,000**	1,750,000	68,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J [0.28 J]	NA
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	NA	10 U [10 U]	10 U	10 UJ	10 U	10 U	2.1 J [2 J]	NA
Carbon Disulfide	800	2,300	- -	**550,000**	1,190,000	13,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.5 [1.3]	NA
CFC-11	2,600	7,300	- -	**1,100,000**	1,100,000	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA
Cyclohexane	- -	- -	- -	**- -**	- -	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	0.73 J [0.85 J]	NA
1,1-Dichloroethane	880	2,500	740	**2,300,000**	5,060,000	380,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA
Isopropylbenzene	800	2,300	28	**56,000**	56,000	29,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	0.26 J [0.25 J]	NA
Methylcyclohexane	- -	- -	- -	**- -**	- -	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	0.85 J [0.86 J]	NA
4-Methyl-2-pentanone	1,800	5,200	- -	**20,000,000**	20,000,000	- -	NA	10 U [10 U]	10 U	R	10 U	10 U	2.6 J [2.5 J]	NA
Tetrachloroethene	5	5	60	**170,000**	200,000	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	4.5	1.0 U [1 U]	NA
Toluene	790	790	270	**530,000**	526,000	61,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	0.29 J [0.26 J]	NA
1,1,1-Trichloroethane	200	200	89	**1,300,000**	1,330,000	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1 U]	NA
Trichloroethene	5	5	200	**4,900**	1,100,000	- -	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	0.44 J	1.0 U [1 U]	NA
Total Xylenes	280	280	49	**190,000**	186,000	70,000	NA	1.0 U [1 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.3 [1.2]	NA
Detected Semivolatile Organics														
2,4-Dimethylphenol	370	1,000	380	**- -**	7,870,000	- -	25 U	5.0 U [5 U]	5.0 U	5.0 U	5.0 U	5.0 U	NA	9.8 J
bis(2-Ethylhexyl)phthalate	6	6	14	**- -**	340	- -	25 U	1.6 J [5 U]	0.62 J	0.58 J	0.66 J	0.40 J	NA	25 U
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	50 U	10 U [10 U]	10 U	10 U	10 U	10 U	NA	50 U

See Notes on last page.

Table 4-30 W-09 Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-33 W-10 Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW10-02 02/12/02 MWW10-02-GW	MWW10-02 11/14/02 MWW10-02-GW02
Detected Inorganics								
Barium	2,000	2,000	670	- -	- -	- -	11.6	15.0
Chromium	100	100	11	- -	- -	- -	6.5 J	18.4
Cobalt	40	100	100	- -	- -	- -	20.0 U	1.3 J
Manganese	50	50	1,300	- -	- -	- -	13.5	18.7
Mercury	2	2	0.0013	**56**	56	- -	0.091 J	0.20 U
Nickel	100	100	73	- -	- -	- -	20.0 U	8.3 J
Vanadium	4.5	62	27	- -	- -	- -	1.6 J	10.0 U
Detected Inorganics-Filtered								
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	10.5	NA
Chromium (dissolved)	100	100	11	- -	- -	- -	6.5 J	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	10.9	NA
Vanadium (dissolved)	4.5	62	27	- -	- -	- -	1.7 J	NA

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-33 W-10 Groundwater Misc.
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW10-02 02/12/02 MWW10-02-GW-021202
Detected Dioxins/Furans							
Total hexachlorodibenzofuran (HxCDF)	- -	- -	- -	- -	- -	- -	1.5
Total hexachlorodibenzo-p-dioxin (HxCDD)	- -	- -	- -	- -	- -	- -	10.3 J
Total pentachlorodibenzo-p-dioxin (PeCDD)	- -	- -	- -	- -	- -	- -	2.6

Notes:
All units are measured in picograms per liter (pg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-33 W-10 Groundwater PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW10-02 02/12/02 MWW10-02-GW	MWW10-02 11/14/02 MWW10-02-GW02
Detected PCBs									
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
MDEQ	Michigan Department of Environmental Quality
PCBs	Polychlorinated Biphenyls
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-33 W-10 VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW10-02 02/12/02 MWW10-02-GW	MWW10-02 02/12/02 MWW10-02-GWDLR3	MWW10-02 11/14/02 MWW10-02-GW02
Detected Semivolatile Organics									
bis(2-Ethylhexyl)phthalate	6	6	14	- -	340	- -	NA	150 J	5.0 U

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-69 DG Shallow Groundwater Inorganic
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-01 08/25/03 MWW901GW(22-32)	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 05/24/04 MWW901GW052404	MWW9-01 11/01/04 MWW9-01-GW-110104TB	MWW9-01 11/04/05 MWW9-01-GW-110405	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808
Detected Inorganics																
Arsenic	10	10	10	- -	- -	- -	3.7 J	10.0 U	4.1 J	10.0 U	22.8	5.3	5.1	3.0	9.5	6.2
Barium	2,000	2,000	670	- -	- -	- -	420	319	246	10.0 U	316	81.1	174	86.5	215 J	192 J
Cadmium	5	5	2.5	- -	- -	- -	5.0 U	5.0 U	0.31 J	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chromium	100	100	11	- -	- -	- -	56.8	15.5	6.7 J	10.0 U	36.8	6.4 J	10.0 U	6.2 J	7.4 J	10.0 U
Cobalt	40	100	100	- -	- -	- -	2.7 J	1.3 J	20.0 U	20.0 U	3.3 J	1.3 J	9.3 J	20.0 U	20.0 U	7.2 J
Copper	1,000	1,000	13	- -	- -	- -	5.0 U	14.6 U	2.6 J	5.0 U	18.8	6.8	5.0 U	1.9 J	5.0 U	5.0 U
Lead	4	4	14	- -	- -	- -	39.1	64.0	4.0	3.0 U	78.4	8.0	3.0 U	3.0 U	3.0 U	3.0 U
Manganese	50	50	1,300	- -	- -	- -	187 J	167 J	147 J	10.0 U	336	180 J	71.6 J	20.7	143 J	74.7 J
Mercury	2	2	0.0013	**56**	56	- -	0.20 U	0.20 U	0.20 U	0.039 J	0.11 J	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel	100	100	73	- -	- -	- -	38.5	11.2 J	5.0 J	20.0 U	28.7	5.1 J	2.7 J	5.2 J	4.5 J	20.0 U
Vanadium	4.5	62	27	- -	- -	- -	1.9 J	2.3 J	10.0 U	10.0 U	12.8	2.3 J	10.0 U	10.0 U	10.0 U	10.0 U
Zinc	2,400	5,000	170	- -	- -	- -	54.4	39.6	20.0 U	20.0 U	43.3	22.2	20.0 U	20.0 U	20.0 U	20.0 U
Detected Inorganics-Filtered																
Arsenic (dissolved)	10	10	10	- -	- -	- -	NA	NA	3.1 J	NA	NA	NA	NA	NA	NA	NA
Barium (dissolved)	2,000	2,000	670	- -	- -	- -	NA	NA	232	NA	NA	NA	NA	NA	NA	NA
Manganese (dissolved)	50	50	1,300	- -	- -	- -	NA	NA	156 J	NA	NA	NA	NA	NA	NA	NA
Nickel (dissolved)	100	100	73	- -	- -	- -	NA	NA	3.9 J	NA	NA	NA	NA	NA	NA	NA
Zinc (dissolved)	2,400	5,000	170	- -	- -	- -	NA	NA	15.4 J	NA	NA	NA	NA	NA	NA	NA

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
J	Estimated concentration
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria
U	Result not detected above method detection limit.

Table 4-69 DG Shallow Groundwater PCB
RACER - Pontiac North Campus

Location ID: Date Collected: Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	Units	MWW9-01 08/25/03 MWW901GW(22-32)	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 11/04/05 MWW9-01-GW-110405	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808
Detected PCBs															
None Detected	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
Flam-Expl	Flamability and Explosivity
GSWI	Groundwater Surface Water Interface
ID	Identification
MDEQ	Michigan Department of Environmental Quality
NA	Not applicable.
PCBs	Polychlorinated Biphenyls
Res	Residential
SVIIC	Soil Volatilization to Indoor Air Inhalation Criteria

Table 4-69 DG Shallow Groundwater VOC-SVOC
RACER - Pontiac North Campus

ARCADIS Design & Consultancy for natural and built assets

Location ID: / Date Collected: / Sample Name:	MDEQ 2013 UPDATED Res DW	MDEQ 2013 UPDATED Non-Res DW	MDEQ 2013 UPDATED GSWI	MDEQ 2013 UPDATED NON-RES SVIIC	MDEQ 2013 UPDATED Water Solubility	MDEQ 2013 UPDATED Flam-Expl	MWW9-01 08/25/03 MWW901GW(22-32)	MWW9-01 12/17/03 MWW901GW(24-34)	MWW9-01 11/04/05 MWW9-01-GW-110405	MWW9-01 05/19/06 MWW9-01-GW-051906	MWW9-01 11/14/06 MWW9-01-WG-111406	MWW9-01 05/03/07 MWW9-01-GW-05-03-07	MWW9-01 11/08/07 MWW9-01-GW-110807	MWW9-01 05/08/08 MWW9-01-GW-050808
Detected Volatile Organics														
Acetone	730	2,100	1,700	**1,000,000,000**	1,000,000,000	15,000,000	10 U	0.90 J	10 UJ	10 U	10 U	2.0 J	10 U	4.4 J
2-Butanone	13,000	38,000	2,200	**240,000,000**	240,000,000	- -	10 UJ	10 U	10 U	10 U	10 UJ	10 U	10 U	0.71 J
Toluene	790	790	270	**530,000**	526,000	61,000	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Detected Semivolatile Organics														
Caprolactam	5,800	17,000	- -	**- -**	5,250,000,000	- -	10 U	1.4 J	10 U	10 U	10 U	10 U	10 U	10 U

Notes:
All units are measured in micrograms per liter (µg/L).

Abbreviations:

DW	Drinking Water
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GSWI	Groundwater Surface Water Interface
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