

GIS Registry Disclaimer

This case was closed by the DNR prior to August 1, 2002, when DNR began adding approved cleanups with residual soil contamination into the GIS Registry. Certain documents that are currently required by ch. NR 726, Wis. Adm. Code may therefore not be included in this packet as they were unavailable at the time the original case was closed.

The information contained in this document was assembled by DNR from a previously closed case file, and added to the GIS Registry to provide the public with information on closed sites with residual soil and/or groundwater contamination remaining above applicable state standards.

GIS REGISTRY

Cover Sheet

July, 2008
(RR 5367)

Source Property Information

BRRTS #: 03-13-002758

ACTIVITY NAME: Octopus car wash

PROPERTY ADDRESS: 1039 E. Washington Ave

MUNICIPALITY: Madison

PARCEL ID #: 60-0709-131-1704-4

CLOSURE DATE: Apr 14, 2000

FID #: 113081210

DATCP #:

COMM #: 53703293839

*WTM COORDINATES:

X: 571274 Y: 290355

** Coordinates are in
WTM83, NAD83 (1991)*

WTM COORDINATES REPRESENT:

Approximate Center Of Contaminant Source

Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

Contaminated Media:

Groundwater Contamination > ES (236)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties
see "Impacted Off-Source Property")*

Soil Contamination > *RCL or **SSRCL (232)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties
see "Impacted Off-Source Property")*

Land Use Controls:

Soil: maintain industrial zoning (220)

*(note: soil contamination concentrations
between residential and industrial levels)*

Structural Impediment (224)

Site Specific Condition (228)

Cover or Barrier (222)

*(note: maintenance plan for
groundwater or direct contact)*

Vapor Mitigation (226)

Maintain Liability Exemption (230)

*(note: local government or economic
development corporation)*

Monitoring wells properly abandoned? (234)

Yes No N/A

** Residual Contaminant Level*

***Site Specific Residual Contaminant Level*

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

NOTICE: Completion of this form is mandatory for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law [ss. 19.31 - 19.39, Wis. Stats.].

BRRTS #: 03-13-002758

PARCEL ID #: 60-0709-131-1704-4

ACTIVITY NAME: Octopus car wash

WTM COORDINATES: X: 571274 Y: 290355

CLOSURE DOCUMENTS (the Department adds these items to the final GIS packet for posting on the Registry)

- Closure Letter**
- Maintenance Plan** (if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)
- Conditional Closure Letter**
- Certificate of Completion (COC)** for VPLE sites

SOURCE LEGAL DOCUMENTS

- Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).
Figure #: **Title:**
- Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

MAPS (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 8.5 x 14 inches unless the map is submitted electronically.

- Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.
Note: Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.
Figure #: 1 **Title: Site location map**
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: 2 **Title: Site features and soil boring locations**
- Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.
Figure #: 15 **Title: Estimated extent of contaminated soil based on site specific conditions**

BRRTS #: 03-13-002758

ACTIVITY NAME: Octopus car wash

MAPS (continued)

- Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: 3 Title: North to south cross section A to A'

Figure #: Title:

- Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.

Note: This is intended to show the total area of contaminated groundwater.

Figure #: Title:

- Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 3 Title: Groundwater flow direction

Figure #: Title:

TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))

Tables must be no larger than 8.5 x 14 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

- Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.
Note: This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: 1 Title: Analytical results - soil - remediation samples

- Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 1 Title: Analytical results - groundwater

- Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: Title:

IMPROPERLY ABANDONED MONITORING WELLS

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.

Note: If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.

- Not Applicable**

- Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.

Note: If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.

Figure #: Title:

- Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

- Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

- Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 03-13-002758

ACTIVITY NAME: Octopus car wash

NOTIFICATIONS

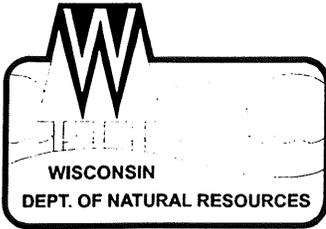
Source Property

- Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.
- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

- Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.
Note: Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.
Number of "Off-Source" Letters:
- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.
- Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies)**. This does not apply to right-of-ways.
Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).
Number of "Governmental Unit/Right-Of-Way Owner" Letters:



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Ruthe E. Badger, Regional Director

South Central Region Headquarters
3911 Fish Hatchery Road
Fitchburg, Wisconsin 53711-5397
Telephone 608-275-3266
FAX 608-275-3338
TDD 608-275-3231

April 14, 2000

File Ref: 03-13-002758

Mr. Mike O'Brian
Octopus Car Wash
1039 East Washington Ave.
Madison, WI 53703

Subject: Closure, Octopus Car Wash, 1039 East Washington Ave., Madison, WI

Dear Mr. O'Brian:

On June 30, 1999 your site was reviewed for closure by the South Central Region Closure Committee. This committee reviews environmental remediation cases for compliance with state laws and standards to maintain consistency in the closure of these cases. On July 19, 1999, you were notified that the Closure Committee had granted conditional closure to this case.

On September 30, 1999 and April 10, 2000, the Department received correspondence indicating that you have complied with the conditions of closure. The correspondence indicates that the recovery and monitoring wells have been properly abandoned and a groundwater use restriction has been attached to the property deed. Based on the correspondence and data provided, it appears that your site has been remediated to Department standards in accordance with s. NR 726.05, Wis. Adm. Code. The Department considers this case closed and no further investigation, remediation or other action is required at this time.

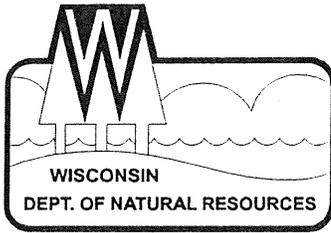
However, please be aware that this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare, or the environment.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at the number below.

Sincerely,

Dino Tsoris, P.G.
Hydrogeologist
Remediation & Redevelopment Program
Telephone (608) 275-3299

Cc: Mr. Khalid Duranni, Advent Environmental, P.O. Box 277, Mequon, WI 53092-0277
Mr. Robert Stroud, Stroud, Willink & Howard, LLC, 25 West Main Street, Suite 300,
P.O. Box 2236, Madison, WI 53701-2236



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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July 19, 1999

File Ref.: 03-13-002758

Mr Mike O'Brien
Octopus Car Wash
1039 East Washington Avenue
Madison, WI 53703

Subject: Closure Request, Octopus Car Wash, 1039 East Washington Avenue, Madison

Dear Mr. O'Brien:

On June 30, 1999, the above-named site was reviewed by the South Central Regional Closure Committee to determine whether the case could be closed. Based on the investigative and remedial documentation provided to the Department, the closure committee has decided that the contamination has been investigated and remediated to the extent practicable under current site conditions. Therefore, the Department has agreed to close the case pending a deed affidavit for residual soil contamination and with a groundwater use restriction.

Residual contamination at the site is not readily accessible. For this reason, the closeout committee requires, as a condition of the closeout, that the property owner sign and record a deed affidavit/ groundwater use restriction at the County Register of Deeds office, giving notice of residual soil contamination and restricting groundwater use at the property. When the deed affidavit/ groundwater use restriction has been properly filed, and the groundwater quality monitoring wells at the site have been abandoned in accordance with NR 141.25, Wis. Adm. Code, the site may receive final closure. To document that this condition has been complied with, the property owner must submit to the Department copies of the well abandonment forms and the properly recorded deed affidavit/ groundwater use restriction. The affidavit may be amended in the future if conditions change at the site and the residual contamination is fully remediated.

To complete the deed affidavit/ groundwater use restriction, the Department requires that a copy of the most recent property deed (including the complete, unabbreviated legal description) be provided. This may be obtained from the County Register of Deeds. Upon receipt of the property deed, the Department will send you a draft copy of the deed affidavit/ groundwater use restriction, for your comment. Upon your acceptance of the draft language, a revised copy will be sent for your signature. You are to then return a signed copy with proof of filing. At that time, the site may receive final closure.

This deed affidavit/ groundwater use restriction is an option that the Department offers to close this site. If you choose not to accept this option, you may perform additional investigation and cleanup of the remaining contamination.

The Department appreciates your efforts in the restoration of the environment. Should you have any questions, feel free to contact me at the above address, or by telephone at (608) 275-3465.

Sincerely,



Lawrence J. Lester
Remediation & Redevelopment Hydrogeologist

cc: Durrani, Advent

Document Number

SOIL AND GROUNDWATER
USE RESTRICTION DEED

REGISTRATION

3177293

12-08-1999 4:28 PM

Trans. Fee

Rec. Fee 16.00
Pages 4

000637

Declaration of Restrictions

Re: All of the Northwesterly 140 feet of Lots Seven (7), and Eight (8), Block One Hundred Seventy-one (171), in the City of Madison, Dane County, Wisconsin. Together with the right to use in common with other owners in the Block a strip of land 50 feet in width running from North Ingersoll Street to North Brearly Street including the side track of Chicago and Northwestern Railroad Co's, and also granting the right to use the spur track of Chicago and Northwestern Railway now on said block and such other spur tracks as shall be constructed therefor.

Except applicable reservations contained in deeds recorded as Documents #344870 and 351304, and agreements recorded as Documents #341313 and 789227 and the rights of University Car Wash, Inc., under an unrecorded lease; also subject to municipal and zoning ordinances.

Name and return address:
Robert R. Stroud
Stroud, Willink & Howard, LLC
P. O. Box 2236
Madison, WI 53701-2236

60-0709-131-1704-4

Parcel Identification Number

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

WHEREAS, John H. Jurkens is the owner of the above-described property.

WHEREAS, as a result of one or more petroleum discharges which have occurred at this property, petroleum contaminated groundwater above NR 140 enforcement standards exists on this property at the following locations:

At recovery well RW-3, benzene at a concentration of 15 ppb was detected when sampled on October 21, 1998 (figure 2, attached),

and following remediation, soil contamination exists at the following locations:

At depths ranging from 7 to 12 feet below the ground surface, one or more PVOCs in excess of the site-specific residual contaminant levels ("SSRCLS") were detected in 14 of 41 samples from samples taken from soil excavation along the northern property boundary near East Washington Avenue and along the eastern boundary line (figure 3, attached).

WHEREAS, it is the desire and intention of the property owner to impose on the property restrictions which will make it unnecessary to conduct additional soil or groundwater remediation activities on the property at the present time.

000688

WHEREAS, natural attenuation has been approved by the Department of Natural Resources to remediate groundwater exceeding ch. NR 140 groundwater standards within the boundaries of this property.

WHEREAS, construction of wells where the water quality exceeds the drinking water standards in ch. NR 809 is restricted by ch. NR 811 and ch. NR 812. Special well construction standards or water treatment requirements, or both, or well construction prohibitions may apply.

NOW, THEREFORE, the owner hereby declares that all of the property described above is held and shall be held, conveyed or encumbered, leased, rented, used, occupied and improved subject to the following limitations and restrictions:

Anyone who proposes to construct or reconstruct a well on this property is required to contact the Department of Natural Resources' Bureau of Drinking Water and Groundwater, or its successor agency, to determine what specific requirements are applicable, prior to constructing or reconstructing a well on this property. No well may be constructed or reconstructed on this property unless applicable requirements are met.

Anyone who proposes to excavate on the property in the future is hereby notified that soil contaminated with one or more PVOcs may be present on the property and when excavated, may be considered a solid waste which will need to be disposed of in accordance with applicable laws and regulations.

These restrictions are hereby declared to be covenants running with the land and shall be fully binding upon all persons acquiring the above-described property whether by descent, devise, purchase or otherwise. These restrictions benefit and are enforceable by, the Wisconsin Department of Natural Resources, its successors and assigns. The Department, its successors or assigns, may initiate proceedings at law or in equity against any person or persons who violate or are proposing to violate these covenants, to prevent the proposed violation or to recover damages for such violation.

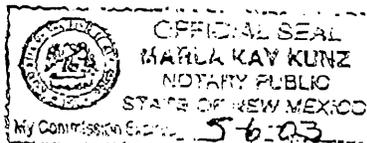
Any person who is or becomes owner of the property described above may request that the Wisconsin Department of Natural Resources or its successor issue a determination that the restrictions set forth in this instrument are no longer required. Upon receipt of such a request, the Wisconsin Department of Natural Resources shall determine whether or not the restrictions contained herein can be extinguished. If the Department determines that the restrictions can be extinguished, an affidavit, with a copy of the Department's written determination, may be recorded to give notice that the groundwater use restriction and/or soil restriction is no longer binding.

IN WITNESS WHEREOF, the owner of the property has executed this Declaration of Restrictions, this 23 day of November, 1999.

John H. Jurkatis
John H. Jurkatis

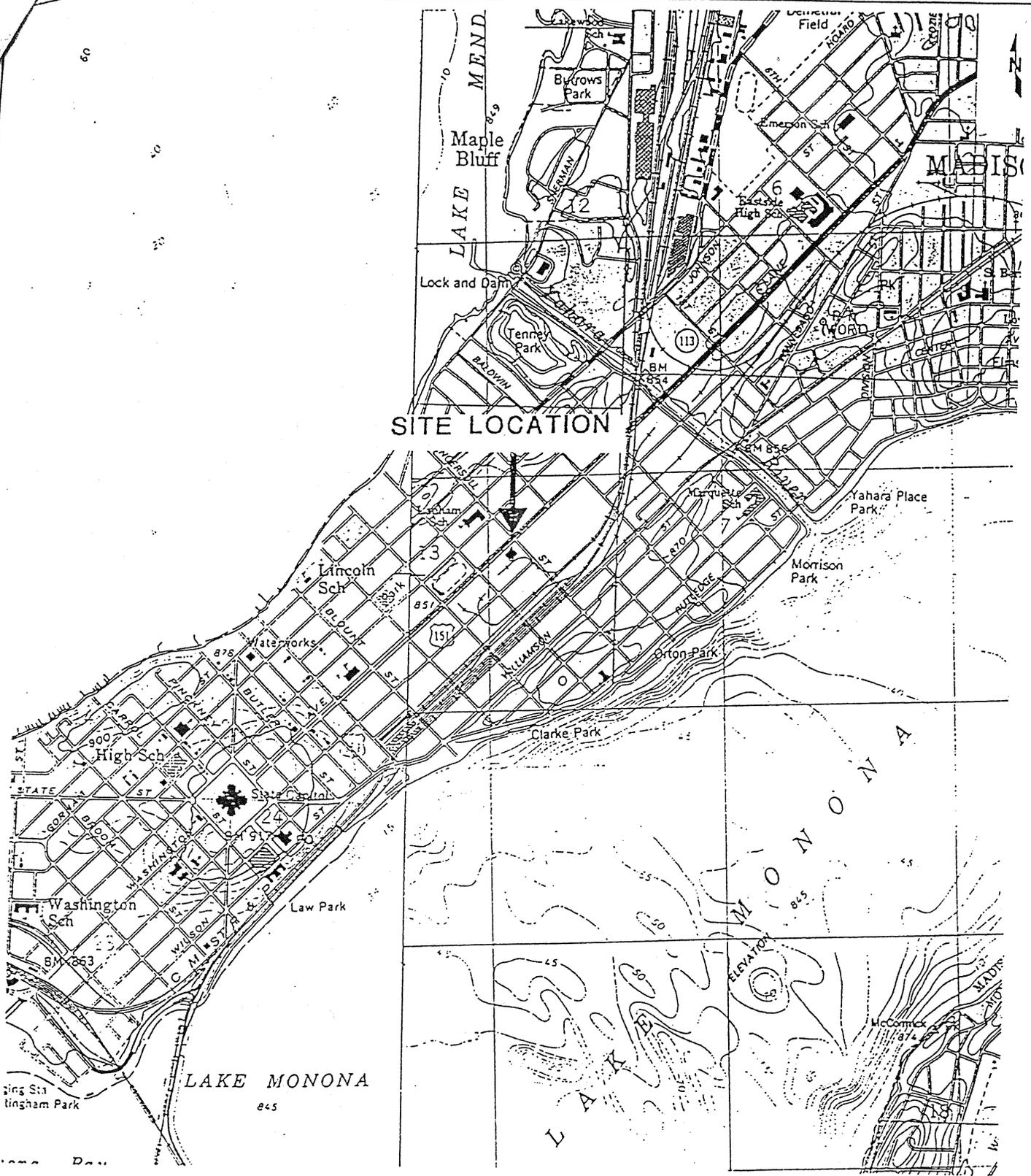
Subscribed and sworn to before me this 23 day of November, 1999.

Marla Kay Kunz
Notary Public, State of New Mexico
My commission: 5-6-03



This document was drafted by:
Attorney Robert R. Stroud
Madison, Wisconsin

000688



NOTE:
 BASE MAP DEVELOPED FROM THE MADISON-EAST, WISCONSIN
 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP.

SCALE (FEET): 0 2000

FIGURE 1 SITE LOCATION
OCTOPUS CAR WASH
EAST WASHINGTON AVENUE
MADISON, WISCONSIN

QUADRANGLE LOCATION
 S'W1/4 NE1/4 SEC.13 T.7N., R.9E.

A D V E N T
 ENVIRONMENTAL SERVICES, INC.
 DATE: 1/17/97
 DRAWING # 950262.02

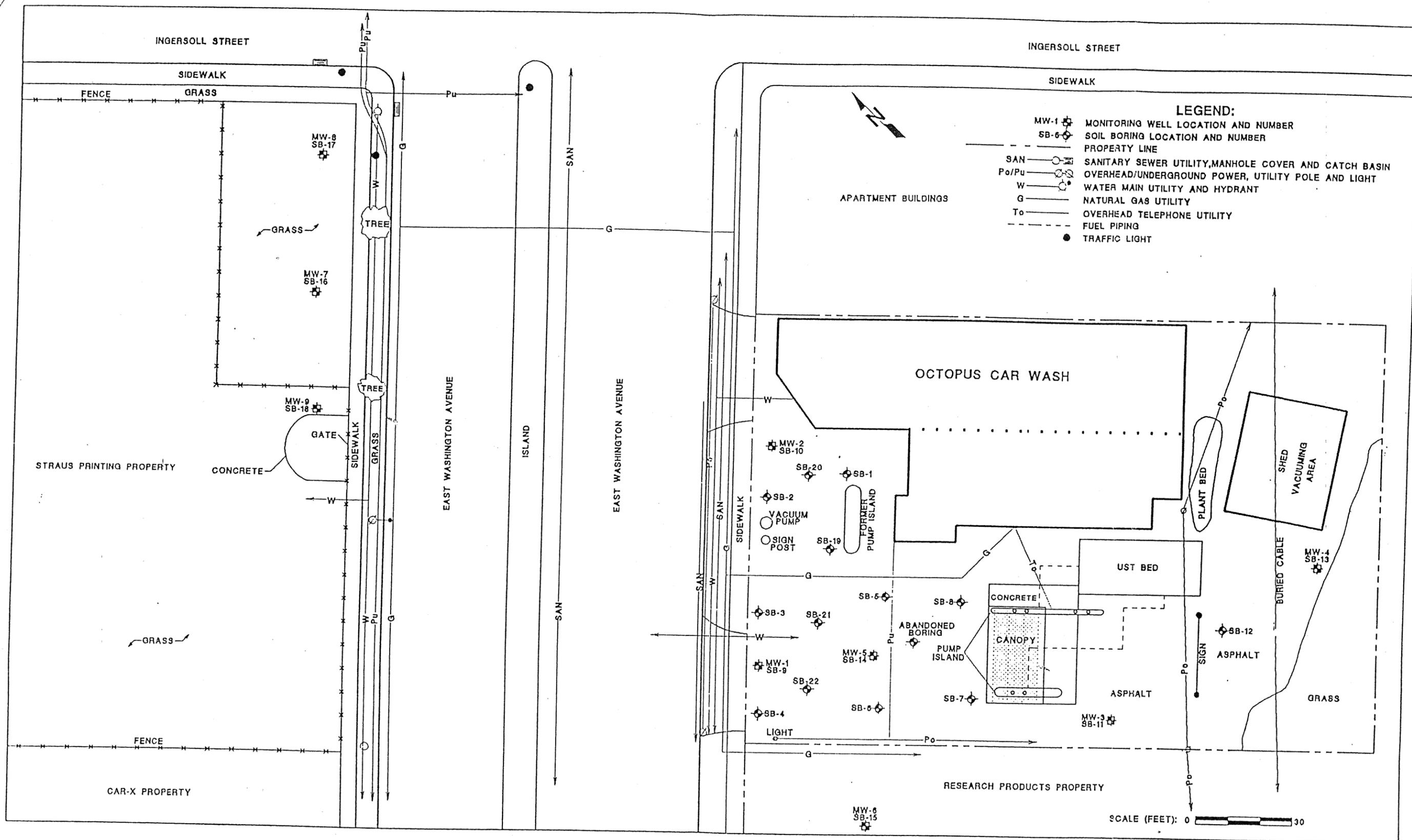


FIGURE 2 SITE FEATURES AND SOIL BORING LOCATIONS
 OCTOPUS CARWASH - EAST WASHINGTON AVENUE
 MADISON, WISCONSIN

A D V E N T
 ENVIRONMENTAL SERVICES, INC.
 DATE: 1/8/97
 DRAWING # 950262.02A

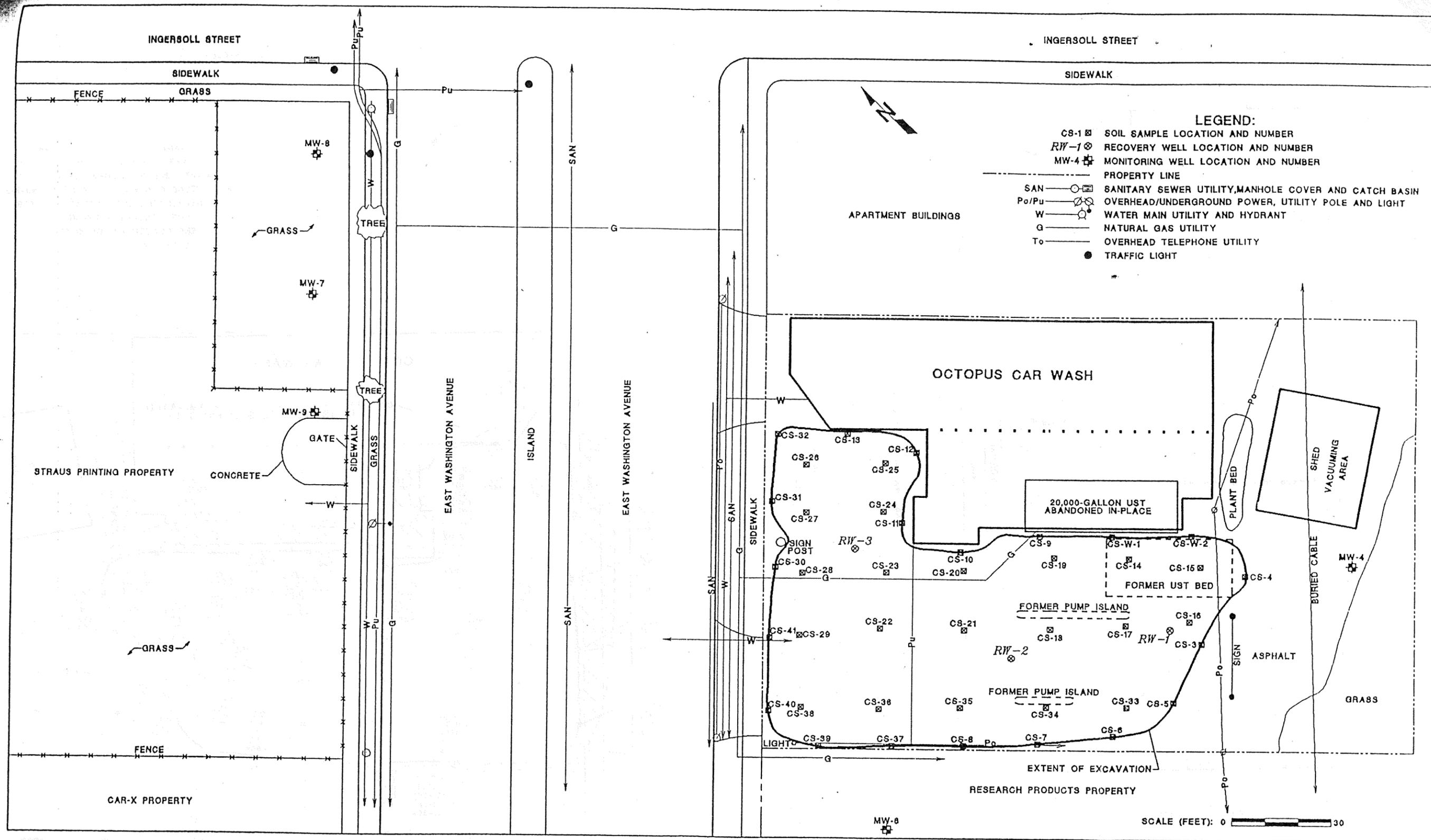


FIGURE 2 SITE FEATURES, CLOSURE SAMPLES,
AND MONITORING WELL LOCATIONS
OCTOPUS CARWASH - EAST WASHINGTON AVENUE
MADISON, WISCONSIN

A D V E N T
ENVIRONMENTAL SERVICES, INC.
DATE: 2/9/98
DRAWING #950262.031

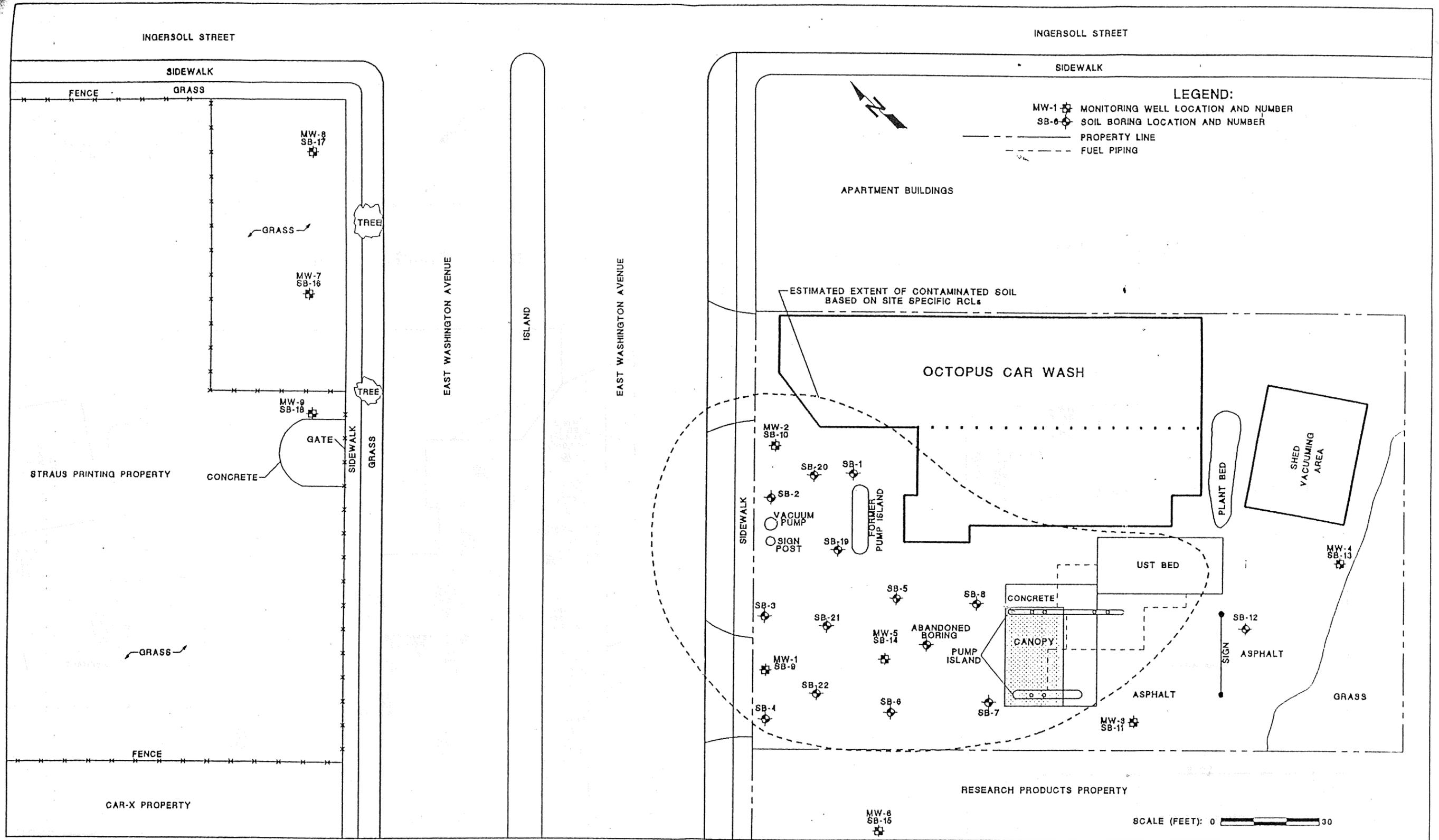
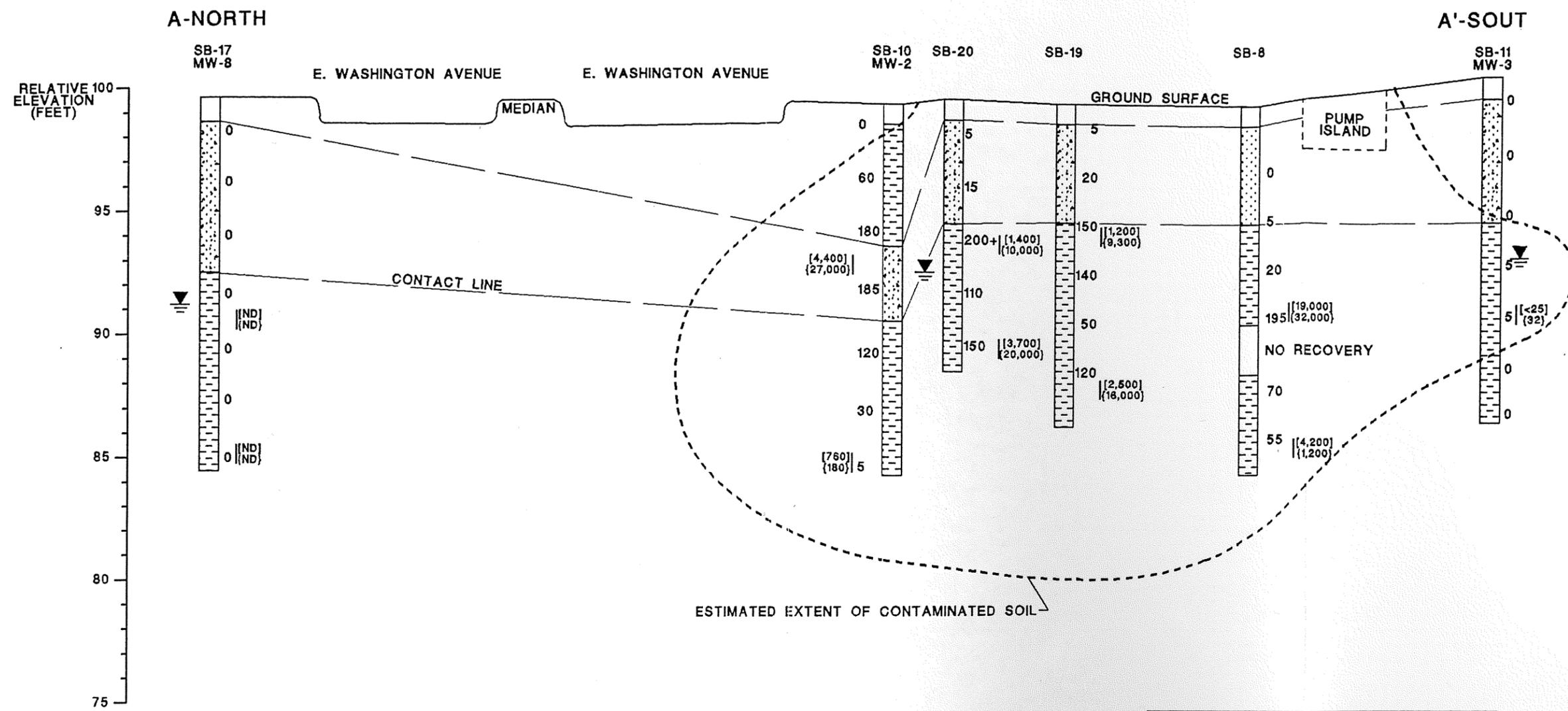


FIGURE 15 ESTIMATED EXTENT OF CONTAMINATED SOIL
 BASED ON SITE SPECIFIC STANDARDS
 OCTOPUS CARWASH - EAST WASHINGTON AVENUE
 MADISON, WISCONSIN

A D V E N T
 ENVIRONMENTAL SERVICES, INC.
 DATE: 1/20/97
 DRAWING # 950262.02D



- LEGEND:**
- SILTY CLAY
 - SANDS AND GRAVEL
 - [<25] - BENZENE CONCENTRATION IN PPB (ND = NOT DETECTED)
 - [32] - ETHYLBENZENE CONCENTRATION IN PPB
 - GROUNDWATER LEVEL IN MONITORING WELL
 - 0 - PID CONCENTRATION IN INSTRUMENT UNITS

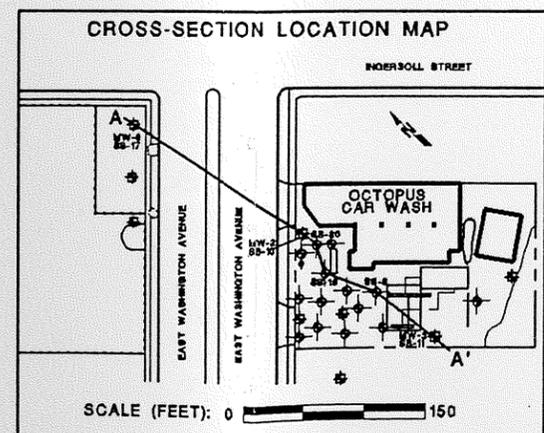
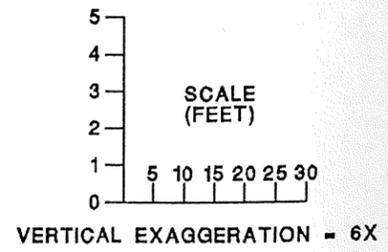


FIGURE 3 NORTH TO SOUTH CROSS SECTION A TO A'
 OCTOPUS CAR WASH - EAST WASHINGTON AVENUE
 MADISON, WISCONSIN

A D V E N T
 ENVIRONMENTAL SERVICES, INC.
 DATE: 1/17/97
 DRAWING # 950262C

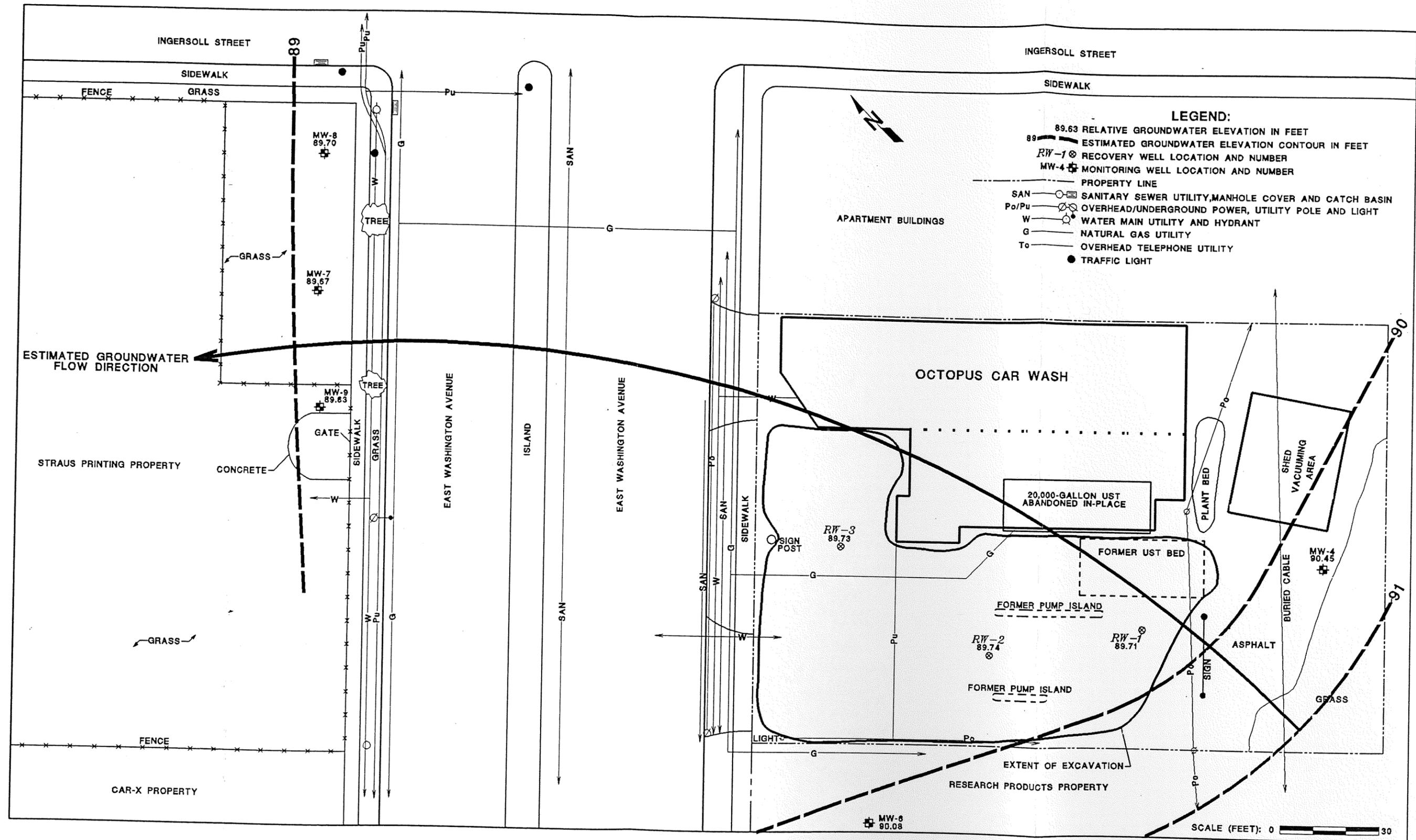


FIGURE 3 GROUNDWATER FLOW DIRECTION
 OCTOPUS CARWASH - EAST WASHINGTON AVENUE
 MADISON, WISCONSIN

A D V E N T
 ENVIRONMENTAL SERVICES, INC.
 DATE: 4/16/99
 DRAWING #950262.03H

**TABLE 3
ANALYTICAL RESULTS - SOIL
OCTOPUS CARWASH, 1039 E. WASHINGTON AVENUE, MADISON, WISCONSIN**

Sample	WDNR RCLs	SB-1-A	SB-1-B	SB-2-A	SB-3-A	SB-3-B	SB-4-A	SB-5-A	SB-6-A	SB-6-B	SB-7-A	SB-7-B	SB-8-A	SB-8-B
Boring		SB-1	SB-1	SB-2	SB-3	SB-3	SB-4	SB-5	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8
Depth (feet)		7-9	13-15	7-9	9-11	13-15	5-7	3-5	7-9	13-15	7-9	13-15	7-9	13-15
Date														
GROs (ppm)	250	2,000	36	590	700	15	200	1,300	550	35	440	31	1,200	29
Total Lead (ppm)	50	8.4	2.6	8.7	8.6	5.3	8.4	8.6	6.5	8.3	8.4	8	43.9	24.1
VOCs (ppb)														
Benzene	5.5	2,500	330	510	<130	1,200	<25	<130	<130	<26	1,900	1,100	19,000	4,200
Bromobenzene	NS	ND	ND	64	ND									
n-Butylbenzene	NS	5,700	370	2,900	7,500	120	360	21,000	5,500	430	3,600	40	14,000	140
sec-Butylbenzene	NS	3,500	170	930	2,600	62	120	5,900	920	98	1,300	ND	1,900	ND
tert-Butylbenzene	NS	ND	ND	1,700	3,600	ND	ND	6,100	ND	ND	ND	ND	ND	ND
2-chlorotoluene	NS	ND	ND	70	ND									
4-chlorotoluene	NS	ND	ND	ND	ND	ND	ND	190	ND	ND	ND	ND	ND	ND
Ethylbenzene	2,900	13,000	1,000	1,000	430	33	690	4,800	5,800	2,200	9,900	2,000	32,000	1,200
Isopropylbenzene	NS	5,600	310	1,800	3,800	110	260	12,000	1,400	270	2,200	220	4,000	56
Isopropylether	NS	1,500	100	480	430	480	170	2,500	2,200	520	2,500	510	4,800	140
p-Isopropyltoluene	NS	3,000	63	860	2,100	ND	51	5,900	320	37	520	ND	640	ND
Methylenechloride	NS	230	95	28	82	ND	32	93	ND	ND	ND	ND	ND	52
MTBE	NS	ND	ND	100	220	ND	ND	280	91	49	160	ND	190	99
Naphthalene	NS	5,400	470	2,200	1,800	90	710	7,800	3,500	2,000	5,400	220	12,000	360
n-propylbenzene	NS	6,200	520	1,900	4,600	190	790	11,000	4,300	1,000	7,200	410	13,000	170
Styrene	NS	ND	170	3,700	ND	32	ND	25,000	ND	250	ND	140	ND	91
Toluene	1,500	5,300	190	1,600	3,800	120	190	11,000	1,100	130	1,900	140	3,300	160
1,2,3-Trichloropropane	NS	340	ND											
1,2,4 TMB	NS	19,000	62	ND	ND	68	150	5,900	11,000	99	21,000	330	29,000	1,200
1,3,5 TMB	NS	2,300	ND	580	720	33	ND	5,600	2,100	28	880	140	8,800	300
Total Xylenes	4,100	11,000	320	1,300	980	1,060	883	7,900	5,900	610	10,000	1,630	76,000	3,600

ND = not detected NS = no standard
RCLs = residual contaminant levels
Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Appendix C.
Shading and bolding indicate concentrations above the RCLs.
TMB = trimethylbenzene

TABLE 3 (continued)
ANALYTICAL RESULTS - SOIL
OCTOPUS CARWASH, 1039 E. WASHINGTON AVENUE, MADISON, WISCONSIN

Sample	WDNR RCLs	SB-9-A	SB-9-B	SB-10-A	SB-10-B	SB-11-A	SB-12-A	SB-13-A	SB-14-A	SB-14-B
Boring		SB-9	SB-9	SB-10	SB-10	SB-11	SB-12	SB-13	SB-14	SB-14
Depth (feet)		6-8	16-18	8-10	16-18	10-12	4-6	8-10		8-10
Date		5/8/96	5/8/96	5/8/96	5/8/96	5/8/96	5/8/96	5/8/96	5/8/96	5/8/96
GROs (ppm)	250	540	<2.3	1,000	19	9.9	<2.3	<2.3	190	200
Total Lead (ppm)	50	11.5	6	6.9	6.8	8.3	7.1	3	6.4	8.5
VOCs (ppb) ¹									590	750
Benzene	5.5	<130	280	4,400	760	<25	<25	<25	ND	ND
Bromomethane		ND	71	ND	ND	27	ND	ND	1,900	1,000
n-Butylbenzene		12,000	66	15,000	340	240	ND	ND	510	270
sec-Butylbenzene		4,200	51	3,700	160	96	ND	ND	ND	ND
tert-Butylbenzene		1,300	ND	ND	ND	ND	ND	ND	7,900	5,400
Ethylbenzene	2,900	6,300	77	27,000	180	32	ND	ND	ND	500
Isopropylbenzene		6,200	99	7,400	350	59	ND	39	ND	1,300
Isopropylether		3,400	500	3,400	79	80	ND	ND	1,300	1,200
p-Isopropyltoluene		1,100	ND	2,700	54	ND	ND	ND	140	82
Methylenechloride		770	ND	780	82	ND	89	48	150	230
MTBE		ND	92	ND	ND	ND	ND	ND	ND	160
Naphthalene		8,800	140	7,300	750	150	ND	ND	3,100	2,600
n-propylbenzene		16,000	170	8,600	590	110	ND	ND	3,500	2,000
Styrene		13,000	ND	ND	220	74	ND	ND	2,000	980
Trichlorofluoromethane		ND	39	ND	ND	ND	ND	ND	ND	40
Toluene	1,500	8,900	110	14,000	170	88	ND	27	1,500	800
1,2,4 TMB		2,100	55	34,000	ND	120	ND	64	280	550
1,3,5 TMB		<91	ND	7,100	ND	ND	ND	ND	56	63
Total Xylenes	4,100	2,700	459	47,000	340	120	ND	ND	2,100	2,200

RCLs = residual contaminant levels

ND = not detected NS = no standard

¹ Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Appendix C.

Shading indicates concentrations above the RCLs.

TMB = trimethylbenzene

**TABLE 3 (continued)
ANALYTICAL RESULTS - SOIL
OCTOPUS CARWASH, 1039 E. WASHINGTON AVENUE, MADISON, WISCONSIN**

Sample	WDNR RCLs	SB-19-A	SB-19-B	SB-20-A	SB-20-B	SB-21-A	SB-21-B	SB-22-A	SB-22-B
Boring		SB-19	SB-19	SB-20	SB-20	SB-21	SB-21	SB-22	SB-22
Depth (feet)									
Date		12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96
VOCs (ppb)¹									
Benzene	5.5	1,200	2,500	1,400	3,700	2,700	3,000	1,900	2,700
n-Butylbenzene		3,700	6,000	4,500	7,100	5,200	11,000	11,000	9,300
sec-Butylbenzene		ND	3,900	2,300	4,600	4,400	5,300	4,100	5,300
tert-Butylbenzene		1,600	2,500	1,500	3,200	ND	ND	ND	630
Di-Isopropyl-Ether		ND	ND	ND	ND	ND	330	390	ND
Ethylbenzene	2,900	9,300	16,000	10,000	20,000	17,000	43,000	49,000	38,000
Isopropylbenzene		3,700	6,500	4,300	7,600	5,700	10,000	10,000	8,900
p-Isopropyltoluene		1,000	1,800	1,200	2,300	2,000	3,600	4,200	3,800
Naphthalene		3,300	4,200	3,800	7,300	4,700	11,000	8,100	9,500
n-propylbenzene		7,200	12,000	7,900	13,000	12,000	14,000	15,000	14,000
Toluene	1,500	ND	ND	2,600	5,100	730	1,400	2,200	1,800
1,2,4 TMB		700	730	880	1,100	1,900	16,000	18,000	18,000
1,3,5 TMB		2,100	2,900	ND	5,100	4,400	6,200	6,300	5,500
Total Xylenes	4,100	7,800	8,800	2,100	2,400	2,900	28,000	35,000	27,000
SPLP VOCs (ppb)	PAL								
Benzene	0.5	2.60	7	4.50	3.20	5.70	ND	60	22
n-Butylbenzene		9	12	15	13	17	ND	90	100
sec-Butylbenzene		8.50	16	17	16	16	ND	11	22
tert-Butylbenzene		ND	1.60	1.50	1.80	ND	5.80	ND	ND
Di-Isopropyl-Ether		ND							
Ethylbenzene	140	27	64	51	65	75	44	570	670
Isopropylbenzene		26	58	54	61	59	32	68	67
p-Isopropyltoluene		5.50	10	11	11	10	94	18	20
Naphthalene	8	130	150	94	110	180	ND	190	260
n-propylbenzene		38	80	78	80	82	48	110	98
Toluene	68.6	2.30	6	4.50	3.10	4.70	ND	21	15
1,2,4 TMB		7	ND	7.50	7.00	56	ND	240	460
1,3,5 TMB		3.50	3	5.50	6.50	21	ND	ND	110
Total Xylenes	124	20	35	27	32	50	30	470	760

RCLs = residual contaminant levels Shading indicates concentrations exceeding RCLs for VOC and exceeding PAL for SPLP VOCs.
 ND = not detected NS = no standard TMB = trimethylbenzene
¹ Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Appendix C.

TABLE 3 (continued)
ANALYTICAL RESULTS - SOIL
OCTOPUS CARWASH, 1039 E. WASHINGTON AVENUE, MADISON, WISCONSIN

Sample	WDNR RCLs	SB-15-A	SB-15-B	SB-16-A	SB-16-B	SB-17-A	SB-17-B	SB-18-A	SB-18-B
Boring		SB-15	SB-15	SB-16	SB-16	SB-17	SB-17	SB-18	SB-18
Depth (feet)									
Date		12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96	12/17/96
GROs (ppm)	250	ND							
Total Lead (ppm)	50	7	10	11	25	7.4	9.2	8.7	3.3
VOCs (ppb) ¹									
Benzene	5.5	ND							
Bromomethane		ND							
n-Butylbenzene		ND							
sec-Butylbenzene		ND							
tert-Butylbenzene		ND							
Ethylbenzene	2,900	ND							
Isopropylbenzene		ND	ND	ND	ND	ND	ND	63	ND
Isopropylether		ND							
p-Isopropyltoluene		ND							
Methylenechloride		ND							
MTBE		ND							
Naphthalene		ND							
n-propylbenzene		ND							
Styrene		ND							
Trichlorofluoromethane		ND							
Toluene	1,500	ND							
1,2,4 TMB		ND	ND	58	ND	ND	ND	33	ND
1,3,5 TMB		ND							
Total Xylenes	4,100	ND	ND	100	ND	46	ND	ND	30

RCLs = residual contaminant levels

ND = not detected

NS = no standard

¹ Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Appendix C.

Shading indicates concentrations above the RCLs.

TMB = trimethylbenzene

TABLE 2 (page 1 of 2)
 ANALYTICAL RESULTS - SOIL - CONFIRMATION SAMPLES
 OCTOPUS CARWASH
 1039 EAST WASHINGTON AVENUE, MADISON, WISCONSIN

	SSRCLs	Samples									
		CONF-1	CONF-2	CONF-3	CONF-4	CONF-5	CONF-6	CONF-7	CONF-8	CONF-9	CONF-10
Depth (feet)		8	10	9	13	10	12	12	10	10	9
Date		9/30/97	9/30/97	10/1/97	10/1/97	10/1/97	10/1/97	10/2/97	10/2/97	10/2/97	10/2/97
PID		200+	190	220	215	200+	215	195	195	220	200
GROs	250	110	150	7,000	6,800	4,300	2,500	770	510	700	480
PVOCs (ppb)											
Benzene	200	880	230	31,000	30,000	19,000	28,000	2,100	1,400	1,800	1,300
Ethylbenzene	21,000	2,900	4,500	140,000	130,000	84,000	58,000	10,000	6,800	8,100	5,900
MTBE	NS	270	160	11,000	10,000	5,600	2,300	2,800	1,400	2,300	1,400
Toluene	5,100	2,100	270	280,000	260,000	160,000	180,000	<200	<130	<250	<130
1,2,4 TMB	NS	5,000	8,400	290,000	270,000	180,000	98,000	460	1,200	710	290
1,3,5 TMB	NS	1,400	2,400	87,000	83,000	54,000	31,000	2,000	1,600	1,900	1,400
Total Xylenes	6,300	11,200	20,100	700,000	660,000	430,000	266,000	7,400	5,300	6,300	4,600

Shaded areas for closure samples indicate concentrations above SSRCLs.

For a complete list of VOCs and detections limits, see Appendix E.

SSRCLs = Site-Specific Residual Contaminant Levels

NS = no standards

TABLE 2 (page 2 of 2)
 ANALYTICAL RESULTS - SOIL - CONFIRMATION SAMPLES
 OCTOPUS CARWASH
 1039 EAST WASHINGTON AVENUE, MADISON, WISCONSIN

	SSRCLs	Samples								
		CONF-11	CONF-12	CONF-13	CONF-14	CONF-15	CONF-16	CONF-17	CONF-18	CONF-19
Depth (feet)		12	12	10	9	9	12	12	10	10
Date		10/8/97	10/8/97	10/8/97	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97	10/9/97
PID		190	120	125	190	250	195	125	200+	200+
GROs	250	150	180	160	780	1,100	600	230	450	200
PVOCs (ppb)										
Benzene	200	100	120	270	<250	<500	<200	<100	550	430
Ethylbenzene	21,000	1,200	1,400	2,300	14,000	24,000	6,500	2,000	2,300	1,000
MTBE	NS	250	440	370	970	1,000	320	140	540	310
Toluene	5,100	<50	<50	<40	<250	<500	<200	<100	<130	<100
1,2,4 TMB	NS	1,800	1,600	4,800	35,000	59,000	36,000	17,000	360	290
1,3,5 TMB	NS	150	180	230	5,900	12,000	7,200	2,700	1,500	470
Total Xylenes	6,300	1,440	1,640	2,780	17,700	31,900	10,400	3,550	2,400	1,000

Shaded areas for closure samples indicate concentrations above SSRCLs.

For a complete list of VOCs and detections limits, see Appendix E.

SSRCLs = Site-Specific Residual Contaminant Levels

NS = no standards

Remediation / monitoring

~~Site investigation~~

TABLE 1
ANALYTICAL RESULTS - GROUNDWATER
OCTOPUS CARWASH
1039 E. WASHINGTON AVENUE
MADISON, WISCONSIN

Sample	MW-1	RW-1	RW-1	RW-1	RW-1	MW-2	RW-2	RW-2	RW-2	RW-2	MW-3	RW-3	RW-3	RW-3	RW-3	NR 140	
Boring/Monitoring well	MW-1	RW-1	RW-1	RW-1	RW-1	MW-2	RW-2	RW-2	RW-2	RW-2	MW-3	RW-3	RW-3	RW-3	RW-3	Remedial Action	
Date	5/21/96	12/9/97	3/16/98	7/17/98	10/21/98	5/21/96	12/9/97	3/16/98	7/17/98	10/21/98	5/21/96	12/9/97	3/16/98	7/17/98	10/21/98	Limits	
ANALYTE																ES	PAL
GROs (ppm)	5.9	ND	0.15	<0.05	0.058	13	<0.05	0.084	<0.05	<0.05	0.25	2.1	0.12	<0.05	0.094	NS	NS
Total Lead (ppb)	1.4	2.2	3	<1.6	<1.6	1.7	1.7	2.3	<1.6	<1.6	1.2	2.9	6.8	<1.6	<1.6	15	1.5
Sulfate (ppm)	NA	68	93	NA	72	NA	60	47	NA	92	NA	46	71	NA	97	--	--
Nitrate (ppm)	NA	5	<0.026	NA	26	NA	5.8	8.6	NA	3.7	NA	3	1.2	NA	0.29	--	--
Iron (ppb)	NA	20	210	NA	<47	NA	<17	3.6	NA	<47	NA	50	5.5	NA	<47	--	--
Manganese (ppb)	NA	590	2300	NA	1300	NA	110	180	NA	800	NA	300	510	NA	1000	--	--
DO (ppm)	NA	0.69	1.68	NA	0.63	NA	0.85	2.14	NA	1.3	NA	0.68	1.76	NA	0.45	--	--
PVOCs (ppb) ¹																	
Benzene	440	<0.016	27	4.1	1	4,000	0.47	22	7	<0.026	35	950	27	11	18	5	0.5
Ethylbenzene	81	<0.29	0.51	<0.24	0.39	240	<0.29	<0.24	<0.24	<0.24	0.84	<2.9	<0.24	<0.24	0.72	700	140
MTBE	ND	<0.2	6	0.8	1.7	ND	<0.20	1.4	0.9	1.3	1.3	<2.0	4.4	1.5	1.7	60	12
Toluene	57	<0.36	0.5	<0.21	<0.21	98	<0.36	0.48	<0.21	<0.21	0.99	18	<0.21	<0.21	0.32	343	68.6
1,2,4-Trimethylbenzene	6.3	<0.3	<0.86	<0.86	<0.86	59	<0.3	<0.86	<0.86	<0.86	5.7	11	<0.86	<0.86	<0.86		
1,3,5-Trimethylbenzene	2.7	<0.34	<0.54	<0.54	<0.54	ND	<0.34	<0.54	<0.54	<0.54	2.6	7.2	<0.54	<0.54	<0.54	480	96
Xylene (total)	192	<0.94	0.38	<0.97	<0.97	438	<0.94	<0.97	<0.97	<0.97	15.2	78	0.37	<0.97	<0.97	620	124
Total PVOCs	779	0	34.39	4.9	3.09	4,835	0.47	23.88	7.9	1.3	61.63	1,064.20	31.77	12.5	17.74	--	--

Shaded areas indicate concentrations above ES.

Bold values indicate concentrations above PAL.

Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Attachment A.

ND = not detected

NS = no standards

NA=Not Analyzed

MTBE=Methyl-tert-butyl-ether

site investigation

TABLE 4
ANALYTICAL RESULTS - GROUNDWATER
OCTOPUS CARWASH, 1039 E. WASHINGTON AVENUE, MADISON, WI

Sample	MW-1	MW-1 (dup)	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6 (dup)	MW-7	MW-8	MW-9	NR 140	
Boring/Monitoring well	MW-1	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-6	MW-7	MW-8	MW-9	Remedial Action	
ANALYTE												Limits	
GROs (ppm)	5.9	NA	13	0.25	0.074	9.2	ND	NA	ND	ND	ND	ES	PAL
Total Lead (ppb)	1.4	NA	1.7	1.2	1.5	2.4	5.7	NA	15	7.3	41	15	1.5
VOCs (ppb) ¹													
Benzene	440	410	4,000	35	0.19	2,600	ND	ND	ND	0.62	ND	5	0.5
n-Butylbenzene	19	19	37	1.8	1.4	23	ND	ND	ND	1.9	ND	NS	NS
sec-butylbenzene	24	23	22	0.38	1	ND	ND	ND	ND	ND	ND	NS	NS
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	4	4	ND	ND	ND	850	85
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5	0.5
Ethylbenzene	81	77	240	0.84	0.2	960	ND	ND	ND	1.3	ND	700	140
Isopropylbenzene	110	110	150	2.9	0.95	38	ND	ND	ND	ND	ND	NS	NS
Isopropylether	220	160	120	5.1	ND	190	ND	ND	ND	ND	ND	NS	NS
p-Isopropyltoluene	3.1	3.2	ND	0.24	0.39	ND	ND	ND	ND	ND	ND	NS	NS
Methylene Chloride	8.4	6.8	77	2	2.1	48	ND	ND	ND	ND	ND	5	0.5
MTBE	ND	ND	ND	1.3	0.33	ND	ND	ND	ND	ND	ND	60	12
Naphthalene	120	130	240	2	ND	170	ND	ND	ND	ND	ND	40	8
n-propylbenzene	160	150	170	2.5	0.54	95	ND	ND	ND	ND	ND	NS	NS
Toluene	57	53	98	0.99	2.3	130	0.72	ND	ND	3.4	ND	343	68.6
1,2,4-Trimethylbenzene	6.3	6.9	59	5.7	1.5	70	ND	ND	ND	3.6	ND	NS	NS
1,3,5-Trimethylbenzene	2.7	2.8	ND	2.6	0.3	ND	ND	ND	ND	1.1	ND	NS	NS
Xylene (total)	192	181	438	15.2	0.94	501	1.7	0.68	ND	6.8	ND	620	124

Shaded areas indicate concentrations above ES.
 Bold values indicate concentrations above PAL.
 Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Appendix C.
 ND = not detected NS = no standards

G.W. monitoring

TABLE 1
 ANALYTICAL RESULTS - GROUNDWATER
 OCTOPUS CARWASH
 1039 E. WASHINGTON AVENUE
 MADISON, WISCONSIN

Sample	MW-8	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9	MW-9	NR 140	
Boring/Monitoring well	MW-8	MW-8	MW-8	MW-8	MW-8	MW-6	MW-6	MW-6	MW-6	MW-6	Remedial Action	
Date	12/18/96	12/9/97	3/16/98	7/17/98	10/21/98	12/18/96	12/9/97	3/16/98	7/17/98	10/21/98	Limits	
ANALYTE											ES	PAL
GROs (ppm)	ND	<0.05	NA	<0.05	0.11	ND	<0.05	NA	NA	NA	ES	PAL
Total Lead (ppb)	7.3	<1.4	NA	<1.6	<1.6	41	<1.4	NA	NA	NA	NS	NS
Sulfate	NA	50	NA	NA	190	NA	230	NA	NA	NA	15	1.5
Nitrate	NA	0.13	NA	NA	0.045	NA	16	NA	NA	NA	--	--
Iron	NA	180	NA	NA	310	NA	<17	NA	NA	NA	--	--
Manganese	NA	28	NA	NA	1500	NA	44	NA	NA	NA	--	--
DO (ppm)	NA	NA	NA	4.88	NA	NA	NA	NA	NA	NA	--	--
PVOCs (ppb) ¹											--	--
Benzene	0.62	<0.16	NA	<0.26	<0.26	ND	<0.16	NA	NA	NA	5	0.5
Ethylbenzene	1.3	<0.29	NA	<0.24	<0.24	ND	<0.29	NA	NA	NA	700	140
MTBE	ND	<0.2	NA	<0.22	<0.22	ND	<0.20	NA	NA	NA	60	12
Toluene	ND	<0.36	NA	<0.21	<0.21	ND	<0.36	NA	NA	NA	343	68.6
1,2,4-Trimethylbenzene	ND	<0.30	NA	<0.86	1	ND	<0.3	NA	NA	NA		
1,3,5-Trimethylbenzene	ND	<0.34	NA	<0.54	<0.54	ND	<0.34	NA	NA	NA		
Xylene (total)	ND	<0.94	NA	<0.97	<0.97	ND	<0.97	NA	NA	NA	480	96
Total PVOCs	1.92	0	--	0	1	0	0	--	--	--	620	124

Shaded areas indicate concentrations above ES.
 Bold values indicate concentrations above PAL.
 Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Attachment A.
 ND = not detected
 NS = no standards
 NA=Not Analyzed
 MTBE=Methyl-tert-butyl-ether

G.W. monitoring

TABLE 1
ANALYTICAL RESULTS - GROUNDWATER
OCTOPUS CARWASH
1039 E. WASHINGTON AVENUE
MADISON, WISCONSIN

Sample	MW-4	MW-4	MW-4	MW-4	MW-4	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	NR 140	
Boring/Monitoring well	MW-4	MW-4	MW-4	MW-4	MW-4	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	Remedial Action	
Date	5/21/96	12/9/97	3/16/98	7/17/98	10/21/98	12/18/96	12/9/97	3/16/98	7/17/98	10/21/98	12/18/96	12/9/97	3/16/98	7/17/98	10/21/98	Limits	
ANALYTE																ES	PAL
GROs (ppm)	0.074	0.17	0.12	0.1	0.11	ND	<0.05	<0.05	<0.05	<0.05	ND	<0.05	NA	NA	NA	NS	NS
Total Lead (ppb)	1.5	1.9	5.3	<1.6	<1.6	ND	<1.4	<2.1	<1.6	<1.6	ND	<1.4	NA	NA	NA	15	1.5
Sulfate	NA	88	270	NA	190	NA	480	190	NA	180	NA	92	NA	NA	NA	-	-
Nitrate	NA	0.035	0.051	NA	0.045	NA	0.79	0.1	NA	0.031	NA	0.31	NA	NA	NA	-	-
Iron	NA	11000	5200	NA	310	NA	25	70	NA	120	NA	31	NA	NA	NA	-	-
Manganese	NA	1300	2700	NA	1500	NA	210	220	NA	360	NA	55	NA	NA	NA	-	-
DO (ppm)	NA	0.3	5.2	4.8	4.8	NA	0.82	3.83	1.09	0.99	NA	NA	NA	NA	NA	-	-
PVOCs (ppb) ¹																	
Benzene	0.19	0.34	<0.26	<0.26	<0.26	ND	<0.16	<0.26	<0.26	<0.26	ND	<0.16	NA	NA	NA	5	0.5
Ethylbenzene	0.2	1.3	<0.24	<0.24	<0.24	ND	<0.29	<0.24	<0.24	<0.24	ND	<0.29	NA	NA	NA	700	140
MTBE	0.33	<0.2	<0.22	<0.22	<0.22	ND	<0.20	0.42	<0.22	0.41	ND	<0.20	NA	NA	NA	60	12
Toluene	2.3	<0.36	1.2	<0.21	<0.21	0.72	<0.36	0.23	<0.21	<0.21	ND	<0.36	NA	NA	NA	343	68.6
1,2,4-Trimethylbenzene	1.5	0.45	0.97	<0.86	1	ND	<0.3	<0.86	<0.86	<0.86	ND	<0.3	NA	NA	NA		
1,3,5-Trimethylbenzene	0.3	<0.34	<0.54	<0.54	<0.54	ND	<0.34	<0.54	<0.54	<0.54	ND	<0.34	NA	NA	NA	480	96
Xylene (total)	0.94	0.45	0.53	<0.97	<0.97	1.7	<0.97	<0.97	<0.97	<0.97	ND	<0.94	NA	NA	NA	620	124
Total PVOCs	5.76	2.54	2.7	0	1	2	0	0.65	0	0.41	0	0.00	-	-	-	-	-

Shaded areas indicate concentrations above ES.

Bold values indicate concentrations above PAL.

Only VOCs detected are listed. For a complete list of VOCs and detection limits, see Attachment A.

ND = not detected

NS = no standards

NA=Not Analyzed

MTBE=Methyl-tert-butyl-ether

Octopus Carwash, East Washington Avenue, Madison, Wisconsin
 Natural Attenuation Shrinking Plume Evaluation
 Proposed "ASTM Guide for Remediation by Natural Attenuation at Petroleum Release Sites"

First order decay formula $C(t) = C(i) \times e^{-kt}$
 where:
 $C(t)$ = Goal contaminant concentration at time t (PAL conc.)
 $C(i)$ = Current contaminant concentration
 k = attenuation rate
 t = time

NATURAL ATTENUATION FOR BENZENE IN RW-1				
Average Attenuation				
Monitoring	Benzene	Benzene conc.	Best Estimate (average Att. Rate)	
	attenuation rate	10/21/98	Days to ES	Years
RW-1	0.0061	1	-263.8	-0.7

NATURAL ATTENUATION FOR ETHYLBENZENE IN RW-2				
Average Attenuation				
Monitoring	Benzene	Benzene conc.	Best Estimate (average Att. Rate)	
	attenuation rate	10/21/98	Days to ES	Years
RW-2	0.0099	0.13	-368.7	-1.0

NATURAL ATTENUATION FOR MTBE IN RW-3				
Average Attenuation				
Monitoring	Benzene	Benzene Conc.	Best Estimate (average Att. Rate)	
	attenuation rate	10/21/98	Days to ES	Years
RW-3	0.0012	15	915.5	2.5