Pre-CERCLA Screening Checklist/Decision Form

This form is used in conjunction with a site map and any additional information required by the EPA Region to document completion of a Pre-CERCLA Screening (PCS). The form includes a decision on whether a site should be added to the Superfund program's active site inventory for further investigation. This checklist replaces Attachment A in the December 2016 PCS Guidance document. A current version of the PCS checklist and additional information is available at: https://www.epa.gov/superfund/pre-cercla-screening.

Region: 5 **State/Territory:** WI **Tribe:** _____ EPA ID No. (If Available): _____

Site Name: Blackhawk Dry Cleaners

Other Site Name(s): Blackhawk Junction Drycleaners, 1-Hour Cleaners

Site Location: 700 E. Blackhawk Avenue, Suite 4 (Street)

3 (Congressional District) | Prairie du Chien (City) | WI (State/Terr.) | CRAWFORD (County) | 53821 - 1653 (Zip+4) | ☐ (No Zip Available)

If no street address is available: T7N, R6W (Township-Range) | 30 (Section)

Checklist Preparer:

Stephen D. Mueller / Hydrogeologist (Name / Title) | 10/15/2018 (Date)

Wisconsin Department of Natural Resources (Organization) | (414) 263-8631 (Phone)

2300 N. Dr. Martin Luther King Jr. Drive (Street) | StephenD. Mueller e-Mail

Milwaukee (City) | WI (State/Terr.) | MILWAUKEE (County) | 53212- (Zip+4)

Site Contact Info/Mailing Address: _____

CERCLA 105d Petition for Preliminary Assessment? No **If Yes, Petition Date (mm/dd/yyyy):** _____

RCRA Subtitle C Site Status: Is site in RCRA Info? Yes **If Yes, RCRA Info Handler ID #:** WID042013839

Ownership Type: Private **Additional RCRA Info ID #(s):** _____

Site Type: Other **State ID #(s):** FID #612034170 / BRRTS #02-12-552357

Site Sub-Type: Dry-Cleaning Operations **Other ID #(s):** _____

Federal Facility? No **Federal Facility Owner:** (Make selection)

Formerly Used Defense Site (FUDS)? No

Federal Facility Docket? No **If Yes, FF Docket Listing Date (mm/dd/yyyy):** _____

Federal Facility Docket Reporting Mechanism: (Make selection)

Native American Interest? No **If Yes, list Tribe:** _____

Additional Tribe (s): (Make Selection)

Additional Tribe (s): (Make Selection)

Site Description

Use this section to briefly describe site background and conditions if known or (easily) available, such as: operational history; physical setting and land use; site surface description, soils, geology and hydrogeology; source and waste characteristics; hazardous substances/contaminants of concern; historical releases, previous investigations and cleanup activities; previous regulatory actions, including permitting and enforcement actions; institutional controls; and community interest.

The Blackhawk Dry Cleaners site is located in the Blackhawk Junction Mall in the residential-commercial center of the City of Prairie du Chien. The dry cleaner operated under four different names and ownerships from January 1997 until many of the stores, including the drycleaners, along the southern side of the mall were destroyed by a fire in the fall of 2013. That area of the mall property remains vacant in 2018.

Prairie du Chien is mostly constructed on Mississippi River flood plain deposits that gently slope from east to west towards the river. The mall property slopes from about 637 feet above mean sea level (ft AMSL) on the east side to 628 ft AMSL on the west side of the mall property. Based on site boring logs, the deposits beneath the property are described as consisting of sand and gravel fill underlain by several feet of silt and/or clay to a depth of approximately 4-7 ft below ground surface (ft BGS), which in turn are underlain by medium- to coarse-grained sand to at least 30 ft

Geospatial Information

Latitude: 43.05091 (Decimal Degree North (e.g., 38.859156))

Longitude: -91.1376737 (Decimal Degree West (e.g., 77.036783))

Provide 4 significant digits at a minimum, more if your collection method generates them.

Except for certain territories in the Pacific Ocean, all sites in U.S. states and territories are located within the northern and western hemispheres and will have a positive latitude sign and negative longitude sign. Coordinate signs displayed above are based on the State/Territory entry on page A-1. Geospatial data tips from the PCS Guidance document are available **here**.

Point Description: Select the option below that best represents the site point for future reference and to distinguish it from any nearby sites. See additional information **here**.

- ☐ Geocoded (address-matched) Site Address
- ☐ Site Entrance (approximate center of curb-cut)
- ☒ Approximate Center of Site
- ☐ Other Distinguishing Site Feature (briefly describe):

Point Collection Method: Check the method used to collect the coordinates above and enter the date of collection. See additional information **here**.

- ☒ Online Map Interpolation
- ☐ GPS (handheld, smartphone, other device or technology with accuracy range < 25 meters)
- ☐ GPS Other (accuracy range is ≥ 25 meters or unspecified)
- ☐ Address Matching: Urban
- ☐ Address Matching: Rural
- ☐ Other Method (briefly describe below):

Collection Date (mm/dd/yyyy): 08/01/2018

POINT-SELECTION CONSIDERATIONS

- Often the best point is a feature associated with the environmental release or that identifies the site visually.
- Use the curb cut of the entrance to the site if there is a clear primary entrance and it is a good identifier for the overall location.
- The approximate center of the site (a guess at the centroid) is useful for large-area sites or where there are no appropriate distinguishing features.
- Use the geocoded address if that is the only or best option available, but if possible use something more representative for sites larger than 50 acres.

Complete this checklist to help determine if a site should be added to the Superfund Active site inventory. See Section 3.6 of the PCS guidance for additional information.	YES	NO	Unknown
1. An initial search for the site in EPA's Superfund active, archive and non-site inventories should be performed prior to starting a PCS. Is this a new site that does not already exist in these site inventories?	☒	☐	☐
2. Is there evidence of an actual release or a potential to release?	☐	☐	☐
3. Are there possible targets that could be impacted by a release of contamination at the site?	☒	☐	☐
4. Is there documentation indicating that a target has been exposed to a hazardous substance released from the site?	☐	☐	☒
5. Is the release of a naturally occurring substance in its unaltered form, or is it altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	☐	☒	☐
6. Is the release from products which are part of the structure of, and result in exposure within, residential buildings or business or community structures?	☐	☐	☐
7. If there has been a release into a public or private drinking water supply, is it due to deterioration of the system through ordinary use?	☐	☐	☐
8. Are the hazardous substances possibly released at the site, or is the release itself, excluded from being addressed under CERCLA?	☐	☐	☐
9. Is the site being addressed under RCRA corrective action or by the Nuclear Regulatory Commission?	☐	☐	☐
10. Is another federal, state, tribe or local government environmental cleanup program other than site assessment actively involved with the site (e.g., state voluntary cleanup program)?	☒	☐	☐
11. Is there sufficient documentation or evidence that demonstrates there is no likelihood of a significant release that could cause adverse environmental or human health impacts?	☐	☒	☐
12. Are there other site-specific situations or factors that warrant further CERCLA remedial/integrated assessment or response?	☐	☐	☒

Preparer's Recommendation: ☐ **Add** site to the Superfund Active site inventory.

☐ **Do not add** site to the Superfund Active site inventory.

Please explain recommendation below:

PCS Summary and Decision Rationale

Use this section to summarize PCS findings and support the decision to add or not add the site to the Superfund active site inventory for further investigation. Information does not need to be specific but, where known, can include key factors such as source and waste characteristics (e.g., drums, contaminated soil); evidence of release or potential release; threatened targets (e.g., drinking water wells); key sampling results (if available); CERCLA eligibility; involvement of other cleanup programs; and other supporting factors. Attach additional pages as necessary.

Groundwater contaminated by CVOCs, including PCE, TCE, and the breakdown product cis-1,2-dichloroethene (cis-DCE), was detected beneath the former drycleaners facility during site investigation sampling in February 2010 (see attached figure and results table). However, the downgradient extent of the CVOC plume has not been delineated. Based on 1991 groundwater investigation results, groundwater flow is west-southwesterly towards the Mississippi River. Although no PCE, TCE, and associated breakdown products have been detected in Prairie du Chien's municipal water supply wells since February 2015, the CVOC contamination poses an ongoing threat to the Groundwater Pathway (potable water supplies), because no remediation of the contamination in unsaturated deposits or groundwater beneath the former drycleaners facility has been undertaken to date. Currently, the foundation(s) of

Stephen D. Mueller	State staff/State contractor	10/15/2018
Checklist Preparer Name	**Checklist Preparer Organization**	**Date**

EPA Regional Review and Pre-CERCLA Screening Decision

Add site to the Superfund active site inventory for completion of a:

- ☒ Standard/full preliminary assessment (PA)
- ☐ Abbreviated preliminary assessment (APA)
- ☐ Combined preliminary assessment/site inspection (PA/SI)
- ☐ Inegrated removal assessment and preliminary assessment
- ☐ Integrated removal assessment and combined PA/SI
- ☐ Other: _____

Do not add site to the Superfund active site inventory. Site is:

- ☐ Not a valid site or incident
- ☐ Being addressed by EPA's removal program
- ☐ Being addressed by a state cleanup program
- ☐ Being addressed by a tribal cleanup program
- ☐ Being addressed under the Resource Conservation and Recovery Act
- ☐ Being addressed by the Nuclear Regulatory Commission
- ☐ Other: _____

Optional - Print name of EPA Site Assessor making this decision: Chrystal Brantley, US EPA SAM

EPA Regional Approval: (Enter Date and then click this box to initiate digital signature stamp)

Date

11/27/2018

Site Description

(All text as entered on page A-2)

The Blackhawk Dry Cleaners site is located in the Blackhawk Junction Mall in the residential-commercial center of the City of Prairie du Chien. The dry cleaner operated under four different names and ownerships from January 1997 until many of the stores, including the drycleaners, along the southern side of the mall were destroyed by a fire in the fall of 2013. That area of the mall property remains vacant in 2018.

Prairie du Chien is mostly constructed on Mississippi River flood plain deposits that gently slope from east to west towards the river. The mall property slopes from about 637 feet above mean sea level (ft AMSL) on the east side to 628 ft AMSL on the west side of the mall property. Based on site boring logs, the deposits beneath the property are described as consisting of sand and gravel fill underlain by several feet of silt and/or clay to a depth of approximately 4-7 ft below ground surface (ft BGS), which in turn are underlain by medium- to coarse-grained sand to at least 30 ft BGS. Groundwater is encountered at approximately 25 ft BGS and flows in a west-southwesterly direction towards the Mississippi River, a regional groundwater divide.

Two municipal wells are located between 650 ft and 750 ft west (upgradient) of the former drycleaners store. The wells are installed to depths of 110 ft and 138.5 ft BGS and cased to 91.3 ft and 89 ft bgs, respectively. Both wells draw water from sand and gravel outwash deposited by the Mississippi River during the period of Wisconsin glaciation. Starting in the late 1980s to early 1990s, several chlorinated volatile organic compounds (CVOCs) were detected in the municipal wells. Tetrachloroethylene (PCE) was detected in the wells at concentrations ranging as high as 26.6 micrograms per liter (µg/L), and trichloroethylene (TCE) was detected at concentrations ranging to 1.29 µg/L, starting in 2009. (The Federal maximum contaminant level for PCE and TCE is 5 µg/L.) TCE is the initial breakdown product of PCE and may reflect the degradation of residual PCE near the wells or it may indicate an unrelated source(s) of TCE contamination. A third municipal well, located approximately 4,200 feet south (side gradient) of the former drycleaners exhibited a one-time detection of PCE at 0.5 µg/L in 1989, but no detections over 14 sampling events since. Historically, there have been very few non-municipal potable wells within the City.

Following discovery of the municipal well contamination, the City initiated an area-wide soil gas survey in April 1991 to identify potential sources of the contamination near the wells. Consequently, five groundwater monitoring wells (MW-1 through MW-5) were installed around the nearby Blackhawk Junction Mall drycleaners facility (referred to as "1 Hour Cleaners") in late June 1991. Two soil samples were collected from each well boring and a third sample was collected from the MW-3 boring. PCE was detected in only MW-3 (0.03 milligrams/kilogram [mg/kg] at 3-5 feet below ground surface [ft bgs] and 0.06 mg/kg at 21-23 ft bgs). Eleven "grab" groundwater sample were collected from two-foot depth intervals in the five well borings, one each from MW-1 and MW-3 through MW-5 and seven from MW-2. PCE was detected in MW-2 (4.39 µg/L at 48-50 ft bgs) and MW-3 (96.2 at 18.1-20.1 ft bgs). (See attachment.)

In September 2008, the City agreed to act as agent on behalf of Blackhawk Junction Dry Cleaners to facilitate a site investigation utilizing funding from Wisconsin's Drycleaner Environmental Response Fund (DERF). Subsequently, additional soil and groundwater investigation activities were conducted in 2009 and 2010. PCE in unsaturated soil (0.016-0.310 mg/kg) and PCE (1.2-64 µg/L) and TCE (0.41-0.81 µg/L) in groundwater were detected beneath the former drycleaner facility. (See attachment.)

In October 2013, the WDNR sent a letter to Blackhawk Junction, LLC explaining that, as the mall property owner (possessor/controller of the contamination), they may be made a "responsible party" (RP) to investigate and clean up the dry cleaner contamination, because the causer(s) of the contamination cannot be conclusively determined. However, a RP letter was not sent to Blackhawk Junction, LLC because Blackhawk Junction Cleaners, LLC (the owner of the drycleaners at that time) agreed to a payment plan with the Wisconsin Department of Revenue (DOR) for payment of state-required dry cleaning fees, which allowed the City (as agent) to continue to fund and seek reimbursement of ongoing investigation activities. After the fall 2013 fire, site investigation activities ceased and the mall became tax delinquent. Foreclosure proceedings for the Blackhawk Junction Mall are underway in 2018.

PCS Summary and Decision Rationale

(All text as entered on page A-4)

Groundwater contaminated by CVOCs, including PCE, TCE, and the breakdown product cis-1,2-dichloroethene (cis-DCE), was detected beneath the former drycleaners facility during site investigation sampling in February 2010 (see attached figure and results table). However, the downgradient extent of the CVOC plume has not been delineated. Based on 1991 groundwater investigation results, groundwater flow is west-southwesterly towards the Mississippi River. Although no PCE, TCE, and associated breakdown products have been detected in Prairie du Chien's municipal water supply wells since February 2015, the CVOC contamination poses an ongoing threat to the Groundwater Pathway (potable water supplies), because no remediation of the contamination in unsaturated deposits or groundwater beneath the former drycleaners facility has been undertaken to date. Currently, the foundation(s) of the fire-destroyed portion of the mall, including the drycleaners facility, remains in place and may prevent surface water infiltration and leaching of CVOC contamination from the unsaturated deposits to groundwater. The Prairie du Chien water system provides potable water to a reported population (water users) of 6,005 in the City and Town of Prairie du Chien and a reported population of 300 in the Town of Bridgeport.

The CVOC contamination may also pose a threat to the Soil Exposure (Subsurface Intrusion) Pathway if a plume of CVOC-contaminated groundwater extents under the residential neighborhood downgradient of the former drycleaners facility. Soil gas samples containing PCE concentrations ranging up to 100 µg/L (converts to mg/m3) were collected up to two city blocks west and almost three blocks south of the former drycleaners facility in 1991 (see attached figure and results table). (The interim SCDM benchmark values for PCE are 0.04 mg/m3 [non-cancer risk] and 0.0093 mg/m3 [cancer risk].) TCE, which has lower SCDM benchmark values, would potentially pose a greater Subsurface Intrusion threat, if and as the PCE contamination degrades to TCE.

FIGURE 1. Site Location - Blackhawk Dry Cleaners

Legend

- PLSS Townships
- PLSS Sections
- PLSS Q-Q Sections

0.5 0 0.25 0.5 Miles

NAD_1983_HARN_Wisconsin_TM

1: 15,840

Note: Not all sites are mapped.

Notes

FIGURE 2. Geolocation Map - Blackhawk Dry Cleaners - 2010

Legend

- Open Site (ongoing cleanup)
- Closed Site (completed cleanup)

Notes

0.1 0 0.03 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 1,980

DISCLAIMER: The information shown on these maps has been obtained from various sources, and are of varying age, reliability and resolution. These maps are not intended to be used for navigation, nor are these maps an authoritative source of information about legal land ownership or public access. No warranty, expressed or implied, is made aregarding accuracy, applicability for a particular use, completemenss, or legality of the information depicted on this map. For more information, see the DNR Legal Notices web page: http://dnr.wi.gov/org/legal/

Note: Not all sites are mapped.

FIGURE 3. Geolocation Map - Blackhawk Dry Cleaners - 2016

Legend

- Open Site (ongoing cleanup)
- Closed Site (completed cleanup)

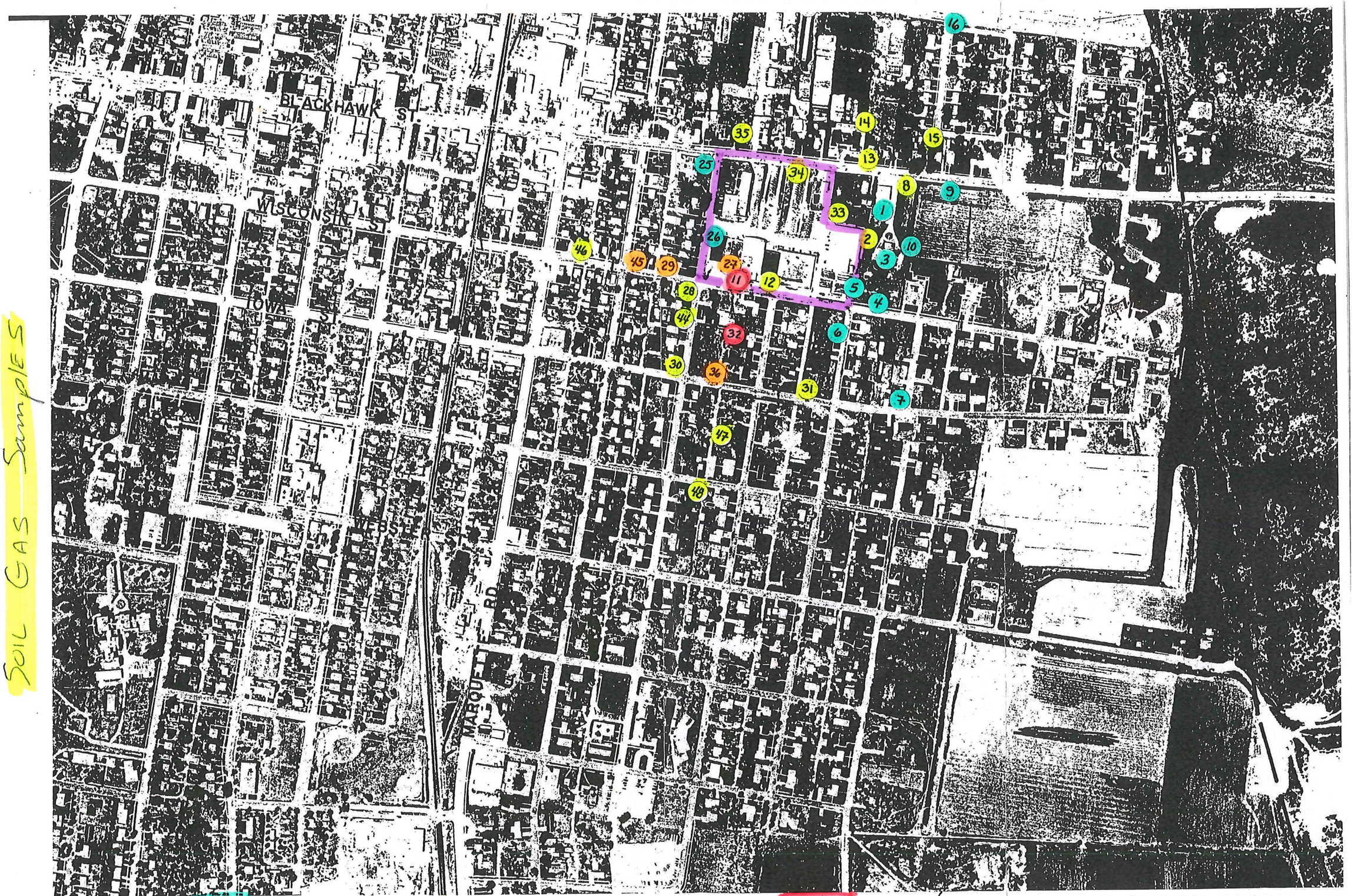
Notes

0.1 0 0.03 0.1 Miles

NAD_1983_HARN_Wisconsin_TM

1: 1,980

Note: Not all sites are mapped.



Soil Gas — Summary

Soil Gas = ND <1 1-8.8 30-100 ug/L

TABLE 5-1

City of Prairie du Chien Soil Gas Analysis			
Probe No.	Sample Volume (ml)	Tetrachloroethylene** ug/l	Detection Limit (ug/l)
1	300	ND	0.007
2	300	0.032	0.007
3	300	ND	0.007
4	300	ND	0.007
5	300	ND	0.007
6	300	ND	0.007
7	300	ND	0.007
8	300	0.020	0.007
9	300	ND	0.007
10	300	ND	0.007
11	300	100.	0.007
12	300	0.302	0.007
13	300	0.111	0.007
14	300	0.094	0.007
15	300	0.063	0.007
16	300	ND	0.017
17	300	ND	0.017
18	300	ND	0.017
19	300	ND	0.017
20	300	ND	0.017

** ug/l = ppb
ND = Not Detected

Table 5-1 (Continued)

City of Prairie du Chien Soil Gas Analysis			
Probe No.	Sample Volume (ml)	Tetrachloroethylene ug/l	Detection Limit (ug/l)
21	300	ND	0.017
22	300	ND	0.017
23	300	ND	0.017
24	300	ND	0.017
25	300	ND	0.017
26	300	ND	0.017
27	5	8.76	1.000
28	300	0.251	0.017
29	300	1.17	0.050
30	100	0.071	0.050
31	300	0.038	0.017
32	5	30.1	1.000
33	100	0.091	0.050
34	100	0.036	0.017
35	300	0.036	0.017
36	100	2.66	0.050
37	100	0.932	0.050
38	300	0.045	0.017
39	300	0.030	0.017
40	300	0.028	0.017

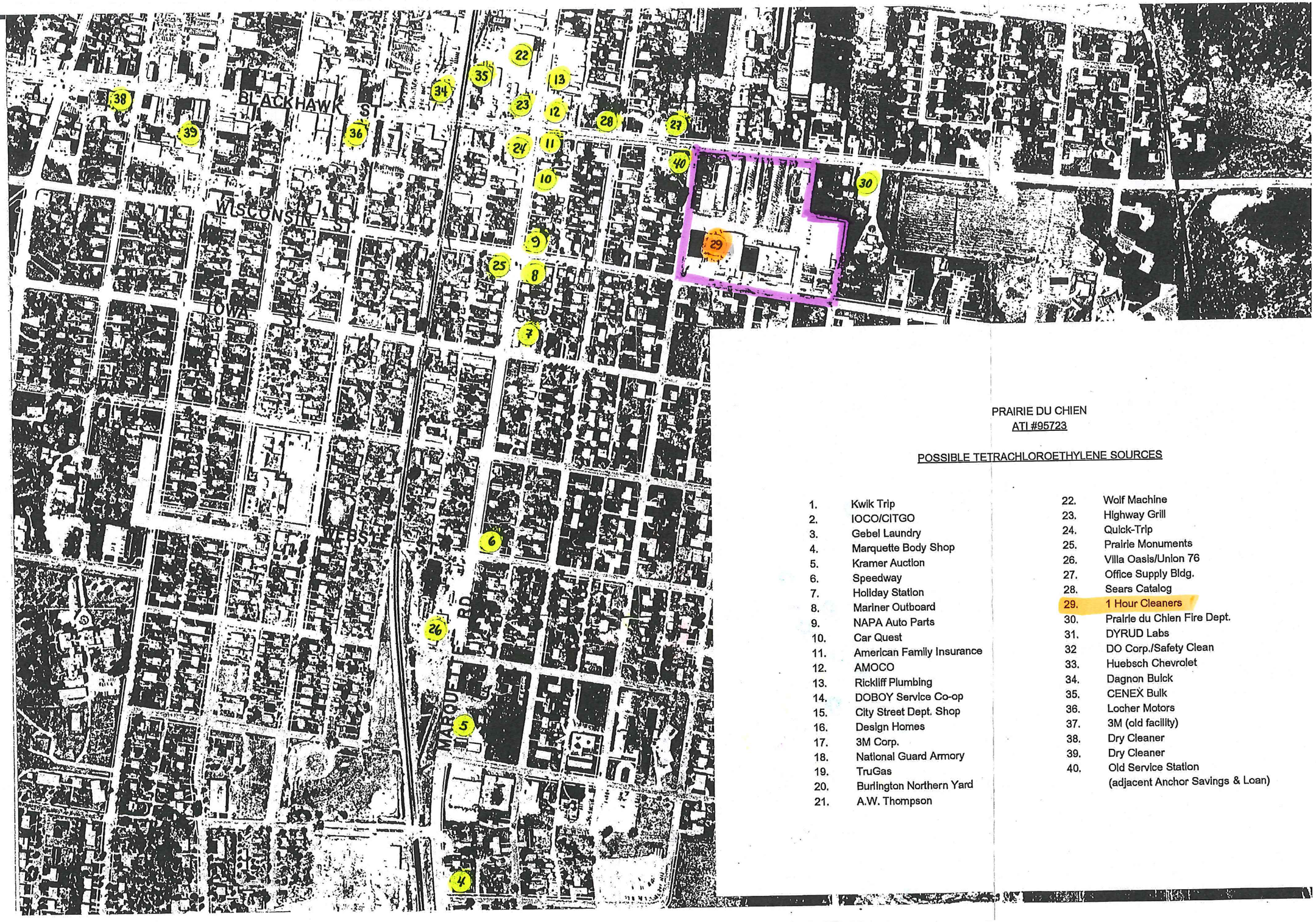
** ug/l = ppb
ND = Not Detected

Table 5-1 (Continued)

City of Prairie du Chien
Soil Gas Analysis

Probe No.	Sample Volume (ml)	Tetrachloroethylene** ug/l	Detection Limit (ug/l)
41	300	0.026	0.017
42	300	0.026	0.017
43	100	ND	0.050
44	300	0.054	0.007
45	300	1.18	0.007
46	300	0.016	0.007
47	300	0.012	0.007
48	300	0.021	0.007
49	300	ND	0.007
50	300	ND	0.007
51	300	ND	0.007
52	300	0.056	0.007
53	300	ND	0.007
54	300	0.027	0.007
55	300	0.575	0.007
56	300	0.010	0.007

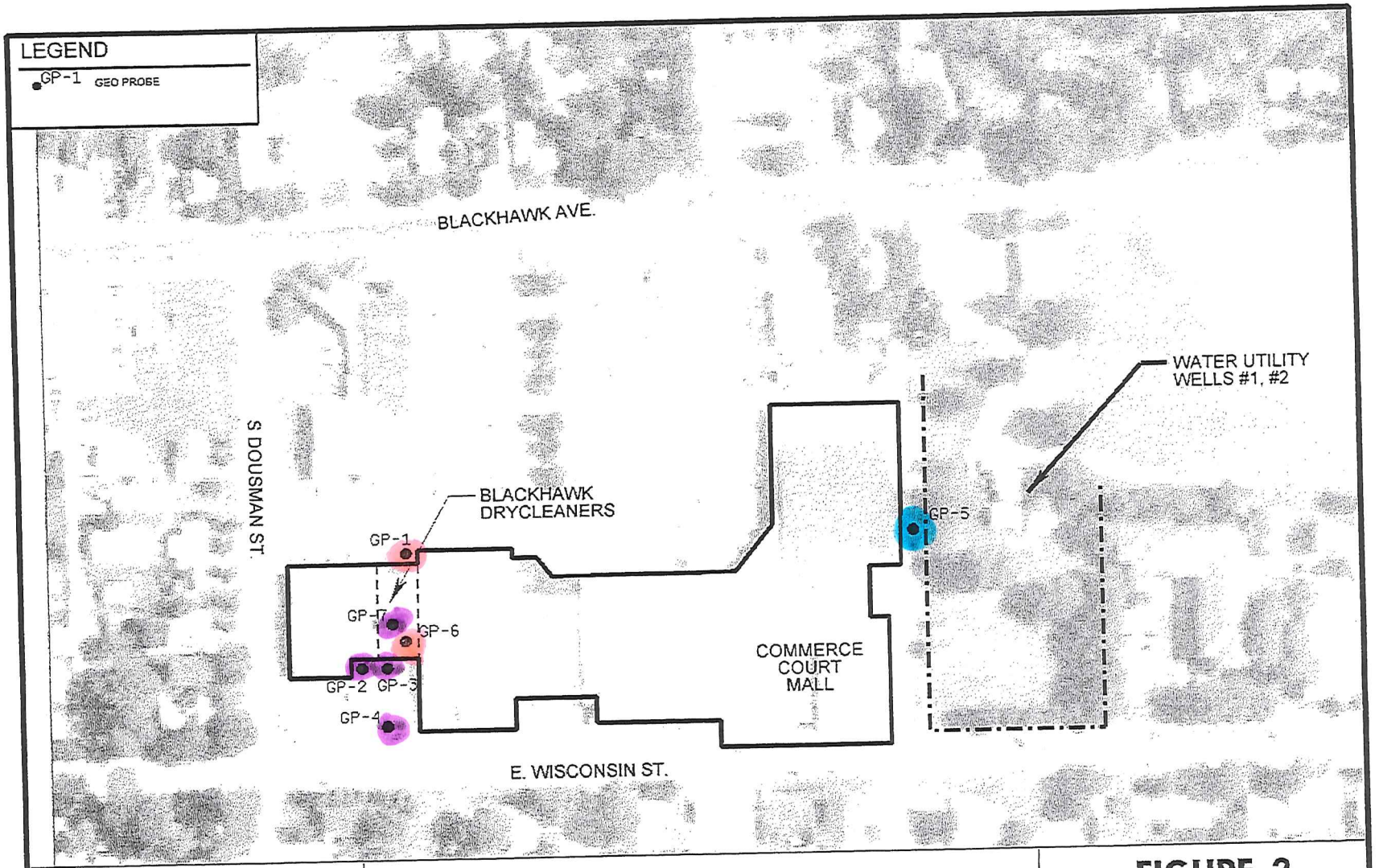
** ug/l = ppb
ND = Not Detected



PRAIRIE DU CHIEN
ATI #95723

POSSIBLE TETRACHLOROETHYLENE SOURCES

1. Kwik Trip
2. IOCO/CITGO
3. Gebel Laundry
4. Marquette Body Shop
5. Kramer Auction
6. Speedway
7. Holiday Station
8. Mariner Outboard
9. NAPA Auto Parts
10. Car Quest
11. American Family Insurance
12. AMOCO
13. Rickliff Plumbing
14. DOBOY Service Co-op
15. City Street Dept. Shop
16. Design Homes
17. 3M Corp.
18. National Guard Armory
19. TruGas
20. Burlington Northern Yard
21. A.W. Thompson
22. Wolf Machine
23. Highway Grill
24. Quick-Trip
25. Prairie Monuments
26. Villa Oasis/Union 76
27. Office Supply Bldg.
28. Sears Catalog
29. 1 Hour Cleaners
30. Prairie du Chien Fire Dept.
31. DYRUD Labs
32 DO Corp./Safety Clean
33. Huebsch Chevrolet
34. Dagnon Buick
35. CENEX Bulk
36. Locher Motors
37. 3M (old facility)
38. Dry Cleaner
39. Dry Cleaner
40. Old Service Station
(adjacent Anchor Savings & Loan)



AYRES ASSOCIATES

SITE LOCATION

MAPPING SOURCE:
WI DNR SURFACE WATER DATA VIEWER

NORTH

80 0 160
GRAPHIC SCALE IN FEET

FIGURE 2

SOIL PROBE LOCATIONS

BLACKHAWK DRY CLEANERS
700 E. BLACKHAWK AVE.
PRAIRIE DU CHIEN, WISCONSIN
DATE: APRIL 2009
JOB NUMBER: 53-0849.00

$FILE$
PEN
$DATE$
$TIME$

PCE &/or TCE
> MCL
> MCLG
~~no detection~~ no detection

Table 2
Blackhawk Dry Cleaners
Groundwater Analytical Results

Volatile Organic Compounds (VOCs)

	Date	2-Butanone	Chloromethane	cis-1,2 dichloroethene	Ethylbenzene	Toluene	m&p Xylene	o Xylene	Naphthalene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Tetrachloro ethene	Trichloro ethene
		micrograms per liter (ug/L)											
GP-1	4/16/2009	12	<0.3	<0.4	0.58	<0.2	<0.5	<0.5	<0.6	<0.24	<0.19	1.2	<0.15
GP-2	4/16/2009	<4	0.32	<0.4	<0.28	<0.2	<0.5	<0.5	<0.6	<0.24	<0.19	16	0.45
GP-3	4/16/2009	<4	1.1	<0.4	<0.28	<0.2	<0.5	<0.5	<0.6	<0.24	<0.19	37	0.41
GP-4	7/24/2009	<4	0.61	0.92	<0.28	<0.2	<0.5	<0.5	<0.6	<0.24	<0.19	64	0.81
GP-5	7/24/2009	<4	2.1	<0.4	<0.28	<0.2	<0.5	<0.5	0.7	<0.24	<0.19	<0.4	<0.15
GP-6	2/17/2010	<4	0.3	<0.4	0.29	0.78	1.3	0.82	<0.6	1.1	0.25	2.6	<0.15
GP-7	2/17/2010	<4	0.32	<0.4	<0.28	0.45	0.71	<0.5	<0.6	0.84	0.2	13	<0.15
PREVENTIVE ACTION LIMIT		90	0.3	7	140	200	1,000		10	96		0.5	0.5
ENFORCEMENT STANDARD		460	3	70	700	1,000	10,000		100	480		5	5

BOLD = exceeds enforcement standards

>MCLG 0 0

>MCL 5 5

no detection