

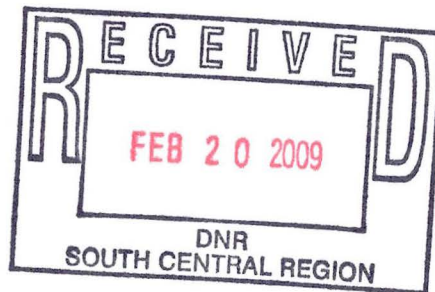
SEYMOUR ENVIRONMENTAL SERVICES, INC.

P.O. Box 398, 2531 Dyreson Road, McFarland, Wisconsin 53558
Telephone: 608-838-9120 Fax: 608-838-9121

February 17, 2009

Mr. Dino Tsois
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Madison, Wisconsin 53711

**Re: Investigation Workplan
Miller's Liquor Property
2401 University Avenue
Madison, Wisconsin**



Dear Mr. Tsois:

Seymour Environmental Services, Inc. completed an environmental assessment at the above referenced property. A summary of the sampling we conducted is included below.

INITIAL SAMPLING

On March 7, 2007 Seymour Environmental personnel met Soil Essentials, the drilling contractor, at the site to conduct initial soil and groundwater sampling. The objective of the assessment was to determine whether the perchloroethene (PCE) noted in groundwater at a monitoring well formerly located near the intersection of University Avenue and Chestnut Street may originate from the Miller's Liquor property (Figure 1). Fieldwork consisted of groundwater and soil sampling at four geoprobes located across the site. All samples were analyzed for volatile organic compounds (VOCs).

The sampling locations were selected based on discussions with the previous owners of the site and inspection of the property. Two probes (B-1 and B-2) were located in the back of the building near the former dry cleaning equipment; one of the geoprobes (B-3) was located near the northeast corner of the building; and the last geoprobe (B-4) was located along the northcentral side of the building near the former dry cleaning equipment and chemical storage area. Sampling locations are shown on the attached Figure 1.

Soil samples were collected continuously from the surface throughout the drilling interval at each geoprobe. The soil samples were described in the field and screened for organic vapors using a photionization detector equipped with a 10.6 eV lamp. Soil encountered at the site was silty clay. Organic vapor screenings did not show extremely elevated levels.

Based on field observations and organic vapor screening five soil samples were selected for laboratory analysis. A shallow soil sample (within 4 feet of the surface) was analyzed from each geoprobe. Additionally, a soil sample from the boring located on the north side of building (B-4) collected just above the water table was analyzed. The samples were analyzed for VOCs. Only one analyte was detected in the soil samples, perchloroethene (PCE). PCE was present in three of the samples. PCE was present in shallow soil at the two geoprobes near the east side of the building (B-1 and B-3). PCE also was present in the deep sample collected at B-4. Soil analytical results are summarized in Table 1.

Groundwater at the site was encountered at a depth of approximately 24 feet. Groundwater samples were collected at each of the geoprobe locations. The samples were analyzed for VOCs. Three analytes, perchloroethene, trichloroethene (TCE) and 1,2,4 trimethylbenzene, were detected in the groundwater samples. Perchloroethene was present in all of the groundwater samples at concentrations that exceed the NR140 Enforcement Standard (ES). The concentration ranged from 44 to 370 ug/l. The higher levels of PCE were present in the geoprobes to the north of the building. Trichloroethene also was present in the groundwater at each of the geoprobes. The TCE concentrations ranged from 1.4 to 7.4 ug/l. The highest TCE level was noted at B-4. This is the same location with the highest PCE concentration. Trimethylbenzenes were detected in groundwater at B-2 (0.98 ug/l). The level of trimethylbenzenes is below WDNR groundwater quality standards. Results of the laboratory analysis of the groundwater are summarized in Table 2.

RESULTS AND CONCLUSIONS

In total, 5 soil samples and 4 groundwater samples were collected at the site. Dry-cleaning related compounds were present in soil samples from three of the borings. Groundwater from all four of the borings also contained dry-cleaning related compounds. Based on the data collected during the assessment it appears that the dry cleaning activities formerly conducted at the property have contributed to PCE contamination in groundwater in the area.

Soil data indicate that a release of dry cleaning chemicals has occurred at the property. The actual release site has yet to be determined. However, PCE was present in soil within 4 feet of the surface in the two probes near Chestnut Street. This seems to indicate that a release occurred in this general area. It is not clear whether the deeper PCE impacted soil identified at B-4 originated from the same release. The extent of soil contamination is shown on Figure 2.

Groundwater analytical data indicate that the property is a source of contaminants related to dry-cleaning operations. Perchloroethene was present in all of the groundwater samples above the NR140 Enforcement Standard. Trichloroethene also was present in all of the groundwater samples collected. The concentrations exceeded the NR140 PAL. Generally, PCE levels in the groundwater flowing onto the site (from the south) are relatively low. PCE levels increased in groundwater samples collected along the north side of the building. The distribution of PCE in groundwater is shown on Figure 3.

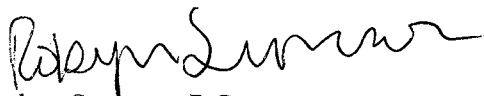
PROPOSED INVESTIGATION

Data collected during the initial assessment confirm that contamination related to dry cleaning chemicals is present at the subject property and, further, likely originated from a release at the property. The data is insufficient to determine the actual release site or whether the dry cleaning chemicals are from a single release point. PCE identified in shallow soils along the eastern side of the building (along Chestnut Street) indicate that a surficial release must have occurred in that area. Contaminant levels within groundwater increase to the north on the subject property. However, PCE levels on the upgradient side of the property are also present above groundwater standards. Based on the information collected during this scoping assessment Seymour recommends that the following additional assessment activities be conducted:

- 1) Install a number of soil probes to determine the actual distribution of dry-cleaning compounds in soil. This information can be used to determine whether removal of the offending soil could aid in restoring groundwater quality. We propose to install 8 borings around the foundation of the building collecting soil samples from 0-4 and 8-12 feet for laboratory analysis of VOCs.
- 2) Install three water-table monitoring wells and one piezometer to evaluate the groundwater flow (horizontal and vertical), and contaminant distribution at the site (Figure 4). The monitoring wells will be set so the 10-foot screens intersect the water table - approximately 30 feet deep. The piezometers will be set so that there is 10 feet of separation between the bottom of the monitoring well screen and the top of the piezometers screen.
- 3) Survey the top of casing locations.
- 4) Conduct groundwater monitoring to assess the contaminant concentration trends and the horizontal and vertical groundwater flow at the property.

Please call me at 608-838-9120 if you have any questions or would like additional information.

Sincerely,
Seymour Environmental Services, Inc.


Robyn Seymour, P.G.
Hydrogeologist

Enc.

cc: Ms. Bonnie Miller

HEALTH AND SAFETY PLAN

Section 1 Hazard Evaluation

Potential health and safety hazards to be encountered during the site investigation include the physical hazards associated with excavating, drilling and the chemical hazards associated with petroleum hydrocarbons. Heat stress is not an anticipated hazard, cold stress is possible. The contaminants at the site include volatile organic compounds. The exposure limits for the contaminants of concern are summarized in Table 2.

Following safe work practices and wearing appropriate personal protective equipment (PPE) as described in Section 1.3 will minimize physical hazards associated with drilling. Monitoring site conditions (section 1.2) and wearing appropriate PPE (section 1.3) will minimize chemical hazards.

TABLE 1: Exposure Limits

Contaminant	Personal Exposure Limit (8-hr TWA)	Short Term Exposure Limit (15-min TWA)	Skin Designation	Ionization Potential (eV)	Odor Threshold
Vinyl chloride	1 ppm	5 ppm	Y	9.99	>PEL
Trichloroethene	100 ppm	300 ppm	Y	9.45	>PEL
Tetrachloroethylene	100 ppm	300 ppm	Y	9.32	>PEL

Section 2 Exposure Monitoring Plan and Action Levels

Exposure monitoring will be performed during potentially hazardous site activities in accordance with the schedule summarized in Table 2.

TABLE 2: Exposure Monitoring Plan and Action Levels

Hazard Type	Monitoring Method	Action Level	Action
Organic Vapors	PID	During drilling	Monitor breathing zone at 15-min. intervals. Level D PPE.
		> 5 ppm	Increase to continuous monitoring.
		> 100 ppm	Change to Level C PPE and continue monitoring.
		> 200 ppm	Wait for levels to decrease before continuing.

Section 3 Personal Protective Equipment

Site workers will begin work with Level D PPE, as described in Table 3. PPE may be upgraded to Level C (Table 3) based on the results of the exposure monitoring.

TABLE 3: Personal Protective Equipment

PPE Level	PPE Description
Level D	<ul style="list-style-type: none">• Hardhat (to be worn during site activities with potential overhead hazards)• Steel-toe shoes• Chemical resistant gloves (non-latex)• Safety glasses
Level C	<ul style="list-style-type: none">• Air-purifying respirator• Chemical-resistant clothing (e.g., Tyvek coveralls, splash suit)• Inner and outer chemical-resistant gloves• Boot covers• Hardhat• Steel-toe shoes• Safety glasses, if half-face respirator is used

Section 4 Contingency Plan

Site Information and Emergency Contacts

Site Name and Address: Miller's Liquor
2401 University Avenue
Madison, Wisconsin 53726
Bonnie Miller
608-233-6995

Agency Contact: Mr. Dino Tsois
608-275-3299

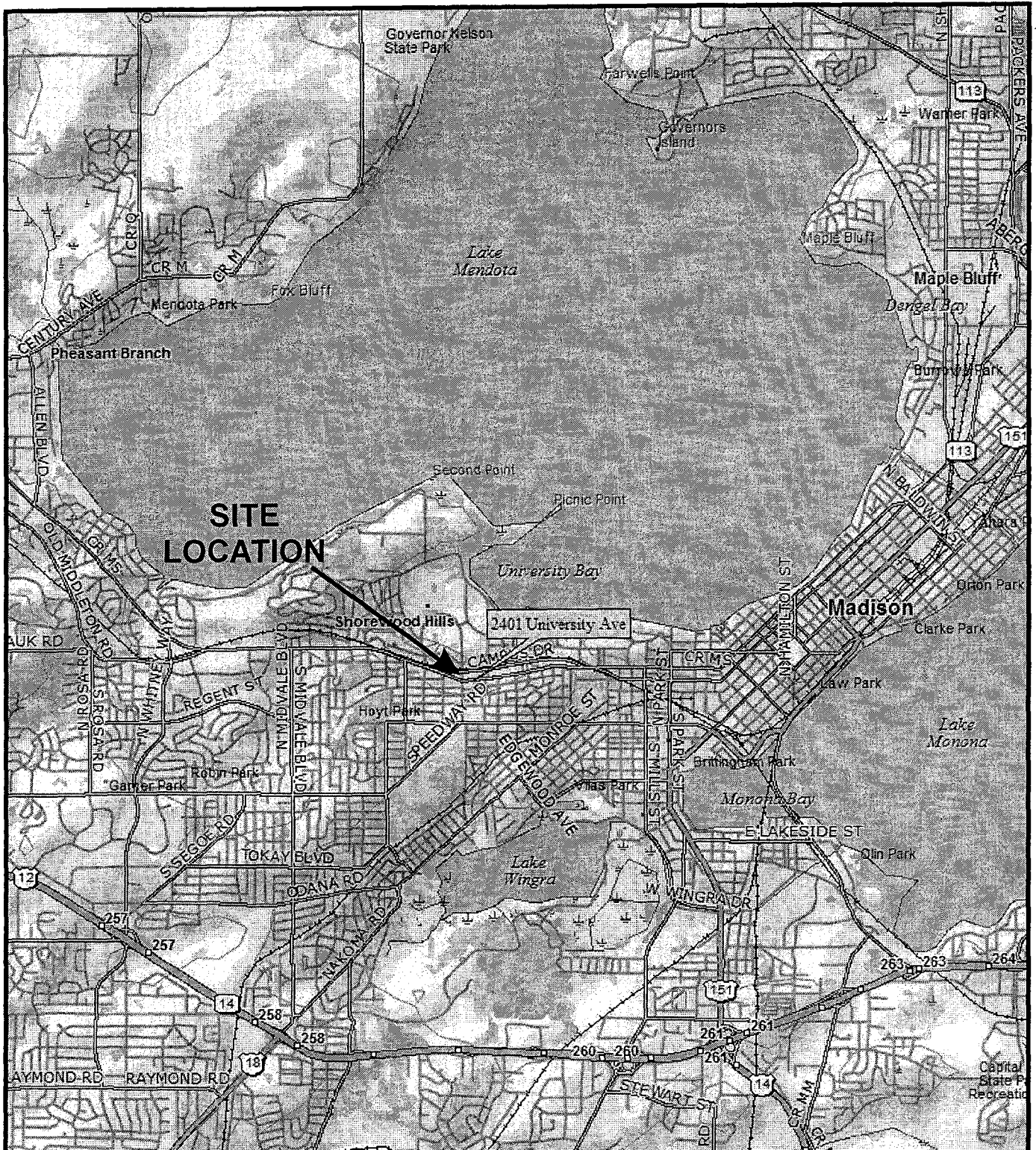
Project Manager: Ms. Robyn Seymour
608-838-9120

Emergency Numbers: Ambulance 911
Police 911
Fire 911

Area Hospital: Meriter Hospital
202 South Park Street
Madison, Wisconsin 53715
608-417-6000

Directions from Site to Hospital

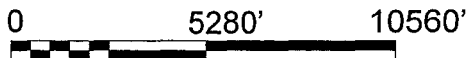
- Go East on University Avenue toward Chestnut Street (0.8 miles)
- University Avenue becomes Campus Drive (0.3 miles)
- Turn slight left onto West Johnson Street (0.3 miles)
- Turn Right onto North Park Street (0.4 miles)
- End at 202 South Park Street.



**SITE
LOCATION**

2401 University Ave

Madison



1 INCH = 1 MILE
SCALE IS APPROXIMATE

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DATE: 12/14/2006

PREPARED: TMB APPROVED:

SOURCE: DeLORME TOPO USA

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SERVICES, INC.**

**SITE LOCATION
Miller's Liquor
2401 University Avenue
Madison, Wisconsin**

FIGURE

1

Best Western In-Towner

UNIVERSITY AVE

Previous MW-8 Location

Groundwater Flow

Property line

asphalt

B-4

B-3

MILLER'S LIQUOR BUILDING

CHESTNUT ST

Former dry cleaning equipment units

Former 55 gal. drum storage

Former oil storage tank location

Former non-chemical storage area location

Former dry cleaning equipment area

Former dry cleaning fluid tank location

SHED

B-2

PCE in Shallow Soil

B-1

- B-2 ● Geoprobe Location
- ⊕ Monitoring Well (abandoned)

0 20' 40'

1 INCH = 20 FEET
SCALE IS APPROXIMATE



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 DATE: 12/04/2006
 PREPARED: TMB APPROVED:
 SOURCE: Delmer Friedrichs, pers. Corr.
 Sigma Env. Services, 2000

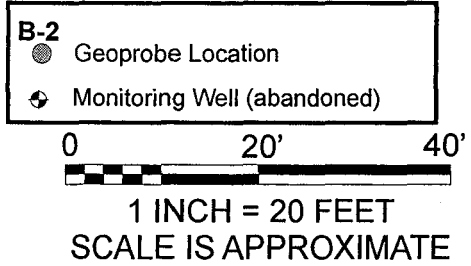
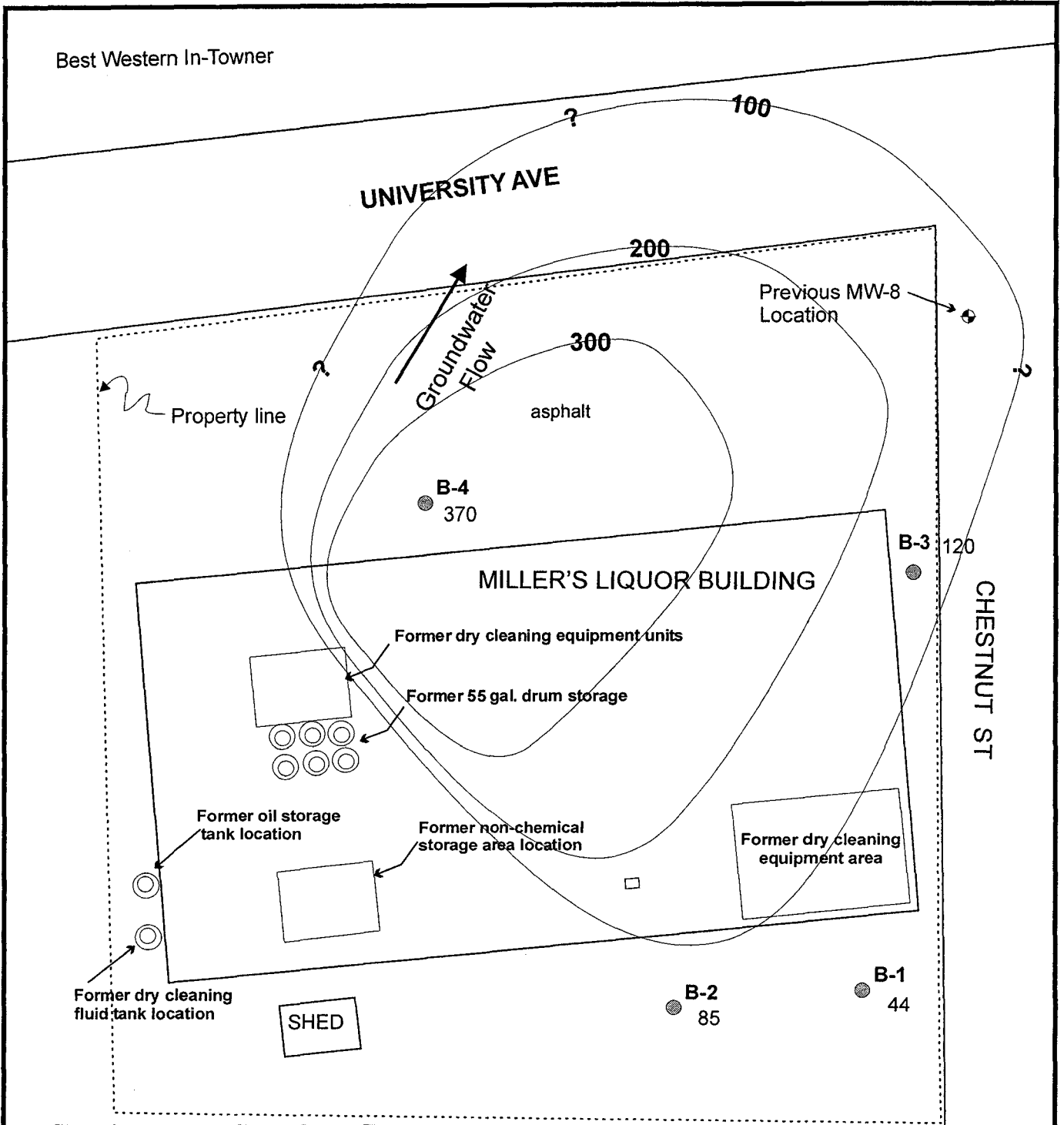
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PCE in SHALLOW SOIL (ug/kg)
Miller's Liquor Property
2401 University Avenue
Madison, Wisconsin

FIGURE

2

Best Western In-Towner



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 SOURCE: Delmer Friedrichs, pers. Corr. Sigma Env. Services, 2000

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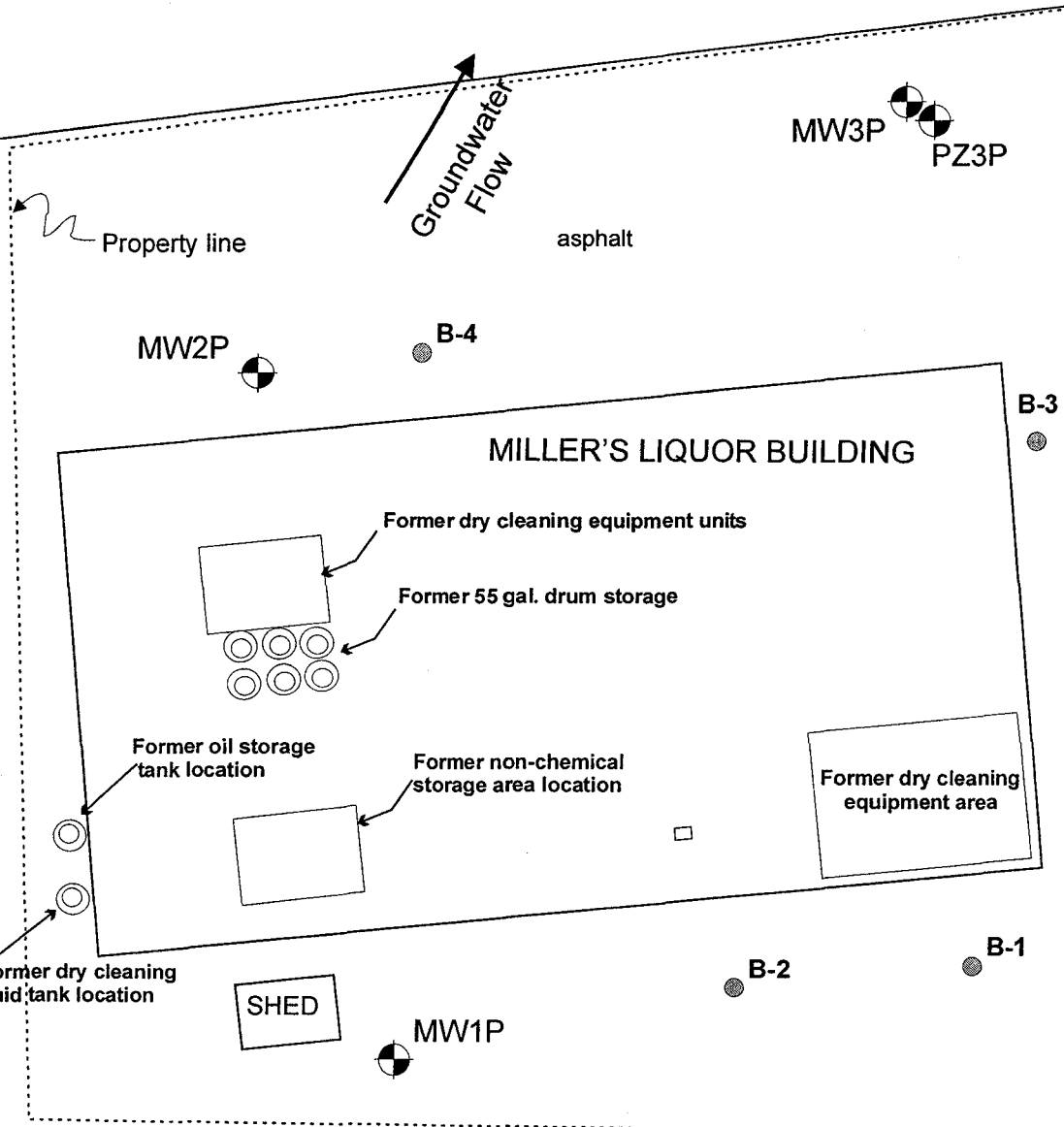
PCE in Groundwater (ug/l)
 Miller's Liquor Property
 2401 University Avenue
 Madison, Wisconsin

FIGURE
3

Best Western In-Towner

UNIVERSITY AVE

Previous MW-8 Location



B-2
 ● Geoprobe Location
 ⊕ Monitoring Well (abandoned)

0 20' 40'

1 INCH = 20 FEET
 SCALE IS APPROXIMATE



FILE/PATH: D:\project\miller liquor\miller liquor.cdr
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PROPOSED MONITORING WELL LOCATIONS
 Miller's Liquor Property
 2401 University Avenue
 Madison, Wisconsin

FIGURE
 4