L1790000000-Tazewell County
Illinois American Water
Company Wells #1 and #3
ILD981958291
Volume 1 of 2

CERCLA
Screening Site Inspection Report

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328294

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1. INTRODUCTION

Illinois Environmental Protection Agency's Pre-Remedial Unit was tasked by the United States Environmental Protection Agency (U.S.EPA) to conduct a screening site inspection of Illinois American Water Company Wells #1 and #3.

The site was initially discovered by the Illinois EPA in April of 1987. The site was evaluated in the form of a Preliminary Assessment (PA) that was completed by Hydrogeologic Unit of the Illinois EPA and submitted to U.S.EPA. IEPA's Pre-Remedial Unit prepared a screening site inspection (SSI) work plan for the Illinois American Water Company Wells that was approved by U.S.EPA. The SSI was conducted on July 25, 1989 with the collection of nine samples (five groundwater and four soil).

The purposes of an SSI have been stated by U.S.EPA in a directive outlining Pre-Remedial program strategies. The directive states:

> All sites will receive a screening SI to 1) collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score, 2) establish priorities among sites most likely to qualify for the NPL [National Priorities List], and 3) identify the most critical data requirements for the listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A listing SI will not automatically be done on these site, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority

> such as RCRA [Resource Conservation and Recovery Act]... Sites that are designated NFRAP or deferred to other statutes are not candidates for a listing SI.
> The listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred by another authority will receive a listing SI (U.S.EPA 1988).

U.S.EPA Region V has also instructed IEPA to identify sites during the SSI that may require removal action to remediate an immediate human health and/or environmental threat.

2. SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained from the SSI work plan preparation.

2.2 SITE DESCRIPTION

The municipal water supply wells for the City of Pekin are owned and operated by the Illinois American Water Company. Wells #1 and #3 are 2 of 8 wells that supply 33,967 Pekin residents with potable water.

The wells are located on each side of Illinois American Water Company's Pekin District Water Plant located at 328 Broadway Street. The Wells are in the N1/2 of the NE1/4 of Section 3 T24N, R5W in Tazewell County, Illinois. More Specifically, well #1 is 200 feet west of Capitol Street and 150 feet south of Broadway Street while well #3 is 150 feet south of Broadway Street and 50 feet west of Capitol Street. (Figure 2-1). A 4-mile radius map surrounding the Illinois American Water Company Wells #1 and #3 is provided in Appendix A.

2.3 SITE HISTORY

Well #1 was drilled in December of 1926 by the Kelly Well Company, Grand Island, Nebraska. Twenty-four inch casing was set at 37 feet and the well is screened in outwash sands to a depth of 90 feet. Well #3 was drilled in February of 1937 to a depth of 100 feet by the same company. Twenty-five inch casing was set to 46 feet and the well is also

Source: IEPA, 1989; USGS Topographic Map 1979, Pekin, IL Quadrangle

Approximate Scale: 1 inch = 1000 feet

Figure 2-1
SITE LOCATION

completed in outwash sands. Well #1 Driller's Log is as follows:

Strata	Thickness (ft)	Depth (ft)
Top soil	4	4
Sand	6	10
Gravel and fine sand	18	28
Coarse sand and gravel	27	55
Coarse sand	15	70
Sand	10	80
Coarse sand	11	91

The drillers log for Well #3 is similar with the exception of sandy clay from 5 to 22 feet.

IEPA's Pre-Remedial Unit became involved with Wells #1 and #3 after repeated sampling detected organic contamination. Table 2-1 on the following page, summarizes the results of the contaminants found in the wells.

Although the exact source of the contamination has not yet been determined, the IEPA's Division of Public Water Supplies Well Head Survey identifies several nearby businesses that could be potential sources. Aerial photography is included in the Survey and can be found in Appendix G. Historical accounts of industries in Pekin were found in Chapter 5 of Pekin's Sesquicentennial History Book 1824-1974.

Table 2-1

Sample Date	Well #1		Well #3	
	1,1,1-TCA	PCE	1,1,1-T	PCE
01/09/89	UDL	UDL	UDL	4
11/07/88	UDL	3	UDL	UDL
07/18/88	UDL	1	UDL	7
05/05/88	2	1	UDL	7
01/25/88	UDL	5	UDL	UDL
11/02/87	UDL	4	UDL	UDL
08/24/87	UDL	UDL	UDL	3
07/23/87	UDL	UDL	4	5
10/28/86	UDL	6	UDL	UDL
08/19/86	4	UDL	UDL	3
01/13/86	24	UDL	0.6	2.5

UDL - under detection limit

concentrations in ug/l (ppb)

1,1,1-TCA - 1,1,1-Trichloroethane PCE - Tetrachloroethylene

3. SCREENING SITE INSPECTION PROCEDURES AND FIELD OBSERVATIONS

3.1 INTRODUCTION

This section outlines procedures and observations of the SSI at Illinois American Water Company Wells #1 and #3. Individual subsections address the site representative interview, reconnaissance inspection and sampling procedures. The SSI was conducted in accordance with the U.S.EPA-approved work plan.

The U.S.EPA Potential Hazardous Waste Site Inspection Report (Form 2070-13) for Wells #1 and #3 is located in Appendix B.

3.2 SITE REPRESENTATIVE INTERVIEW

A site representative interview was conducted on December 19, 1988 with Dick Tatlock, Chief Operator of the Illinois American Water Company's Pekin District Plant. This author obtained information on the wells, as well as suggestions on depth to bedrock, groundwater flow direction, and potential sources of contamination. On January 3, 1989, IEPA personnel met with city mayor, Larry Homerin. Permission for the installation of monitor wells on city property was granted. John Hamann, Fire Chief, supplied some information on hazardous materials used by various local industries.

3.3 RECONNAISSANCE INSPECTION

IEPA personnel conducted a reconnaissance inspection of

Wells #1 and #3 plus surrounding area on December 19, 1988, and January 19, 1989. The inspections included walking around the Illinois American Water Companys' property, as well as nearby streets and businesses to identify potential sampling locations and appropriate health and safety requirements. Jim McCloud, with the Street Department, assisted in finalizing well locations.

After reviewing past and present land use patterns, which revealed industries southwest and west of the wells, this author decided to concentrate sampling efforts toward these possible sources.

Reconnaissance Inspection Observations. Wells #1 and #3 are located near the center of town and approximately 2000 feet east of the Illinois River. Residential areas are south and east of the wells while north is commercialized with the west and southwest being more industrialized. Surface topography in the area is relatively flat, with storm sewers collecting runoff.

3.4 MONITOR WELL INSTALLATION

Groundwater monitor well installation took place from January 30 to February 1, 1989, with the installation of three of the wells. The remaining two wells were installed on July 5 and 6, 1989. The five monitor wells range in depth from 43 feet to 64.5 feet with outwash sand and gravel predominating each location. With the exception of well G103, the wells were installed on city property. The drilling was accomplished with 3 3/4 inch hollow stem augers

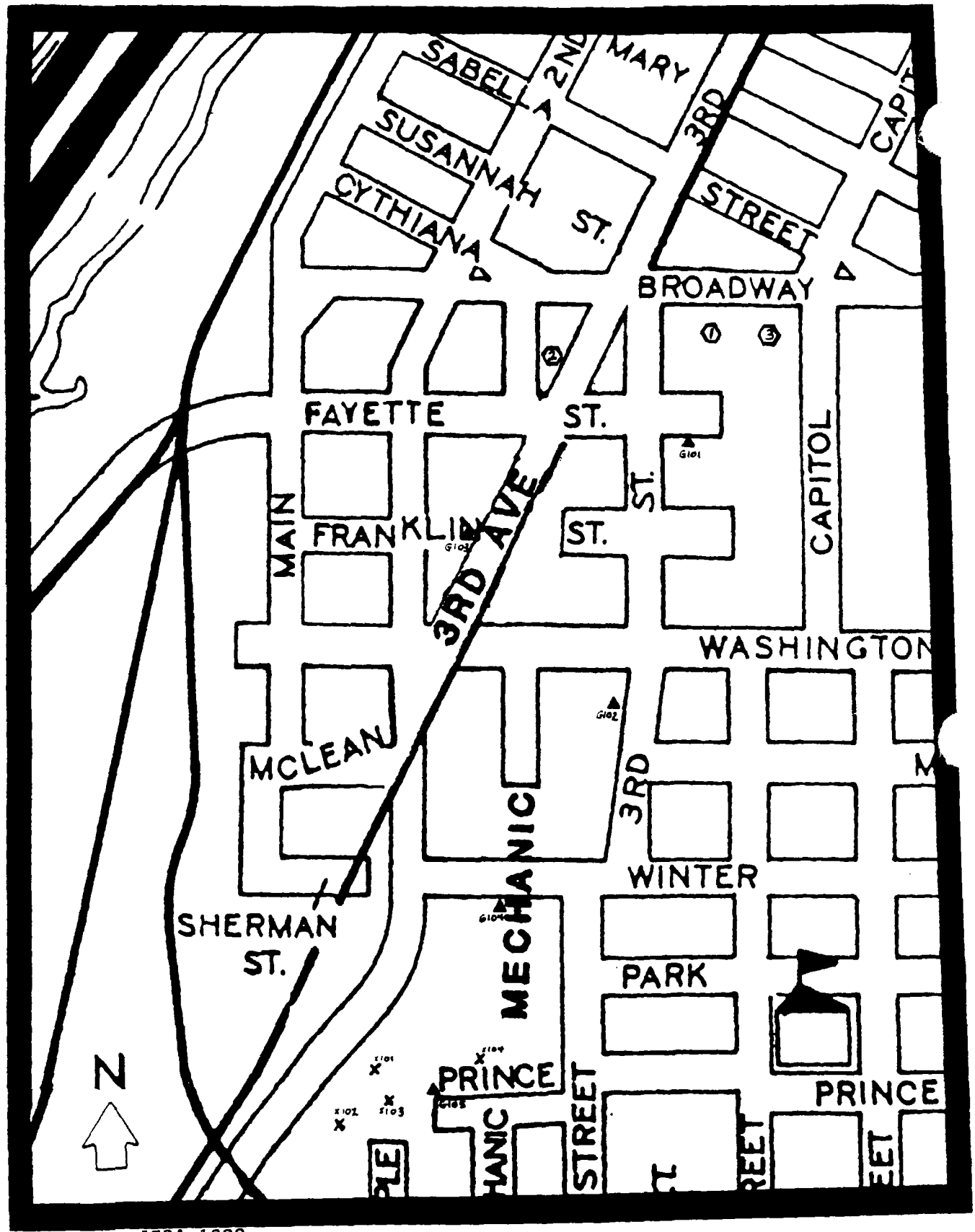
and knockout plate. An Organic Vapor Analyzer (OVA), utilizing flame ionization technique, monitored air around the borehole as drilling commenced. Johnson 2-inch, 304 stainless steel casing with stainless steel #10 slot screen were used as monitor well construction materials. Before departing each well location, a protective cover was grouted in place and locked.

Monitor well G103 was installed on January 30. A parcel of land, (west of the new Third Avenue and south of Illinois American Water Company Well #2) owned by the State of Illinois was an ideal location. The Illinois Department of Transportation permitted the installation of the well. The boring was drilled to a total depth of 50 feet with the well screened in sand from 40.3 to 45.4 feet.

Monitor well G102 was installed on January 31. The well is located near the southwest corner of the intersection of Washington Street and old Third Street. The boring was drilled to 45 feet and the well screened from 38 to 43 feet. Modest increases in OVA readings occurred at the water table 36 feet down.

Closer to the two contaminated public wells, G101 is located on the south side of Fayette Street and east of the old Third Street near the east side of the alley. G101 was installed on the first of February and screened from 47.4 to 52.4 feet.

Monitor well G104 was drilled July 5, to a depth of 65 feet and screened from 54 to 64.5 feet. G104 is located on



Source: IEPA 1989

Figure 3-1

MONITOR WELL AND SOIL SAMPLE LOCATIONS

Approximate Scale
1 inch = 400 feet

the south side of Winter Street, west old Third Street and east of Third Avenue.

Monitor well G105 was the last well installed. On July 6, the G105 was drilled to a total depth of 60 feet and screened from 49.5 to 60 feet. The well is located at the end of Prince Street between the R.R. tracks and Tour Ice Company.

3.5 MONITOR WELL DATA

Groundwater elevations were measured on February 14, 1989 utilizing the first three monitor wells installed. Water table contours indicated flow direction toward the north and pumping wells #1 an #2. On August 17, 1989, groundwater elevations were again taken using all five wells. The water table contours indicate a groundwater divide in the area of old Third Street and Winter Street. At some point near this area and during this time, groundwater flows were either northeast toward wells #1 and #3 or southwest toward the Illinois River. Water plant operator, Dick Tatlock, mentioned that during that date and time only, one of two wells may have been pumping. Groundwater flow direction maps illustrated in Figure 3-2 and 3-3

3.6 SAMPLING PROCEDURES

Samples were collected by IEPA personnel to determine levels of U.S.EPA Target Compound List (TCL) compounds present at the site. The TCL is provided in Appendix C.

On July 25, 1989, IEPA collected five groundwater samples and four soil samples (see Figure 3-2 for the

nine sampling locations).

Groundwater Sampling Procedures. The five monitor wells (indicated as G101, G102, G103, G104 and G105 on Figure 3-2) had five well volumes purged, with pH, conductivity and temperature measured. The wells were purged and sampled with a three foot teflon bailer and nylon cord. The total metals sample was field filtered with a Masterflex variable speed peristalic pump and filter stand with filters. After sample collection, preservatives were added to the appropriate bottles, evidence taped and packaged in accordance with U.S.EPA required procedures.

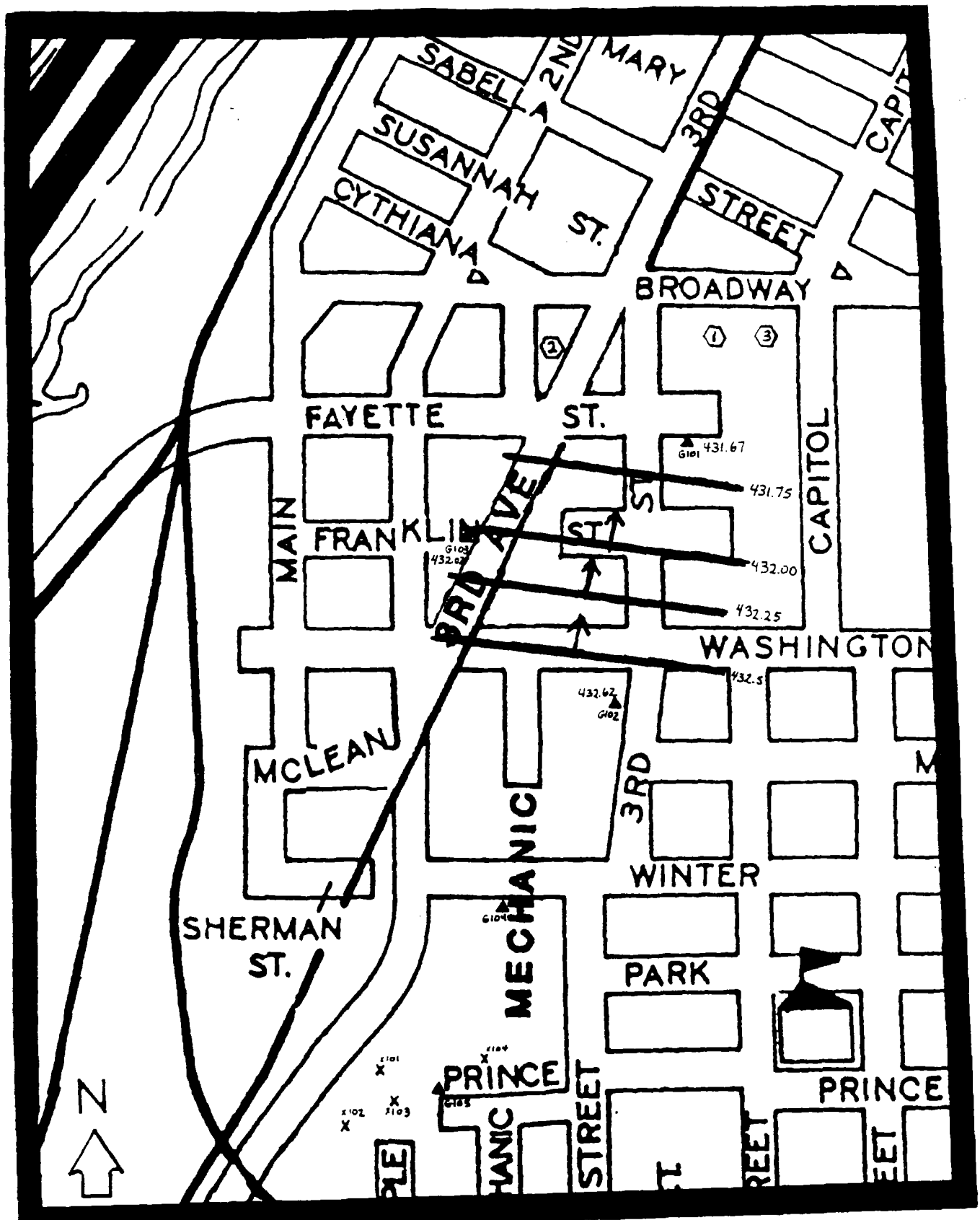
All groundwater samples were analyzed for the TCL by IEPA's Springfield lab (Organic analysis) and IEPA's Champaign lab (Inorganic analysis).

Soil Sampling Procedures. The four soil samples (see Figure 3-2 for locations) were taken to compare a background sample to PRP (potentially responsible party) soil samples. The PRP is the former location of Valley Chemical and Solvents (ILD025733866) at 904 South Second Street (about 1800 feet southwest of Well #1). Sample X101 was taken from a depth of 2 to 3.5 feet in the middle of an old dock where Valley Chemical and Solvents loaded and unloaded trucks. The soil for this sample was saturated with water at this depth. Sample X102 was taken from a depth of 6 inches to 1.5 feet in an area of an old building 12.5 feet from the south fence and 115 feet west of the R.R. tracks. Sample X103 was taken from a depth of 3 to 5 feet in the middle of a low spot

(approximately 4 feet deep), west of a water hydrant, toward the southeast side of the site. The photo-ionization detector (HNU) with an 11.7 eV lamp, at this point read approximately 100 meter units above background. The soil in sample X103 was also saturated. Sample X104 was taken from a depth of 6 inches to 1.5 feet deep in the middle of Tour Ice Company's lot. Sample X104 was taken as background because soil in this area appeared to be representative and undisturbed.

The soil samples were hand augured with stainless steel bucket augers, with the soil transferred directly into the jars. The sample jars were evidence taped and packaged in accordance with U.S.EPA required procedures. The IEPA samples were analyzed for the TCL by IEPA's Springfield lab (Organic analysis) and IEPA's Champaign lab (Inorganic analysis). Photographs for the Illinois American Water Company Wells #1 and #3 screening site inspection are provided in Appendix D.

Decontamination Procedures. Standard Illinois Environmental Protection Agency decontamination procedures were followed prior to the collection of all samples. The procedures included the scrubbing of all equipment (bailers, spoons, pans, etc.) with a non-foaming Trisodium Phosphate solution, rinsing with hot tap water, rinsing with acetone, rinsing with hot tap water again and final rinsed with distilled water. All equipment is air dried, then wrapped and stored in heavy duty aluminum foil for transport to the



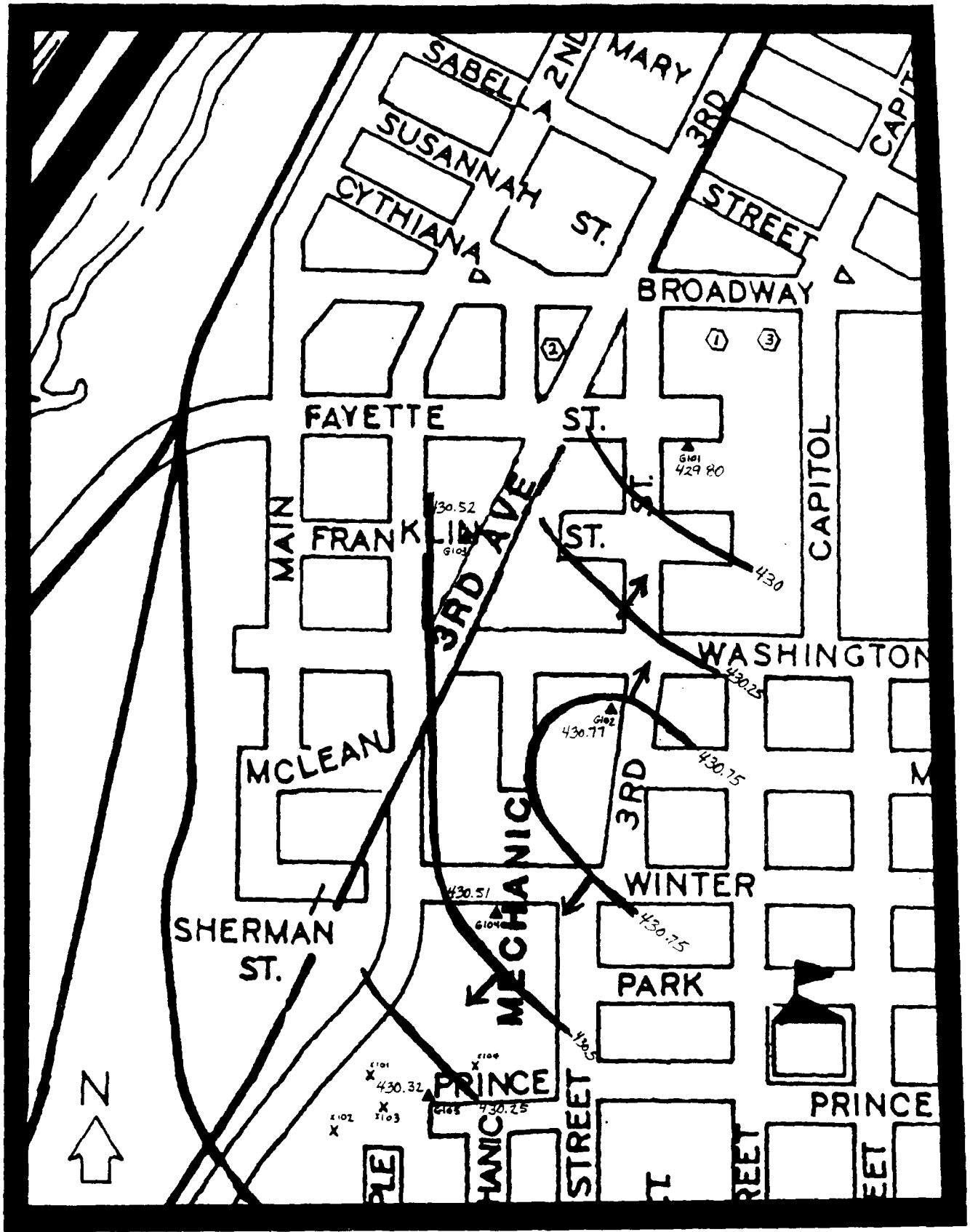
Source: IEPA, 1989.

Figure 3-2

WATER TABLE FLOW CONTOURS Feb. 14, 1989

Approximate Scale

1 inch = 400 feet



Source: IEPA, 1989.

Figure 3-3

WATER TABLE FLOW CONTOURS Aug. 17, 1989

Approximate Scale
1 inch = 400 feet

field. Field decontamination procedures include all of the above except the hot tap water rinse.

4. ANALYTICAL RESULTS

4.1 INTRODUCTION

This section includes the analytical results of Target Compound List compounds from IEPA collected samples at the former Valley Chemical and Solvent facility and monitor wells.

4.2 ANALYTICAL RESULTS FROM IEPA COLLECTED SAMPLES

Chemical analysis of groundwater samples collected by IEPA personnel revealed the following substances: volatiles, common laboratory artifacts and common groundwater constituents. Analysis of soil samples collected by IEPA personnel revealed the following substances: volatiles, pesticides, semi-volatiles, heavy metals, common laboratory artifacts and common soil constituents (see Table 4-1 for the summary of groundwater and soil sample results. Complete laboratory analytical data for the groundwater and soil samples are provided in Appendix H.

In groundwater sample G101, Benzene was estimated with a value at 3 ug/l (ppb) while Diethylphthalate was estimated at 1 ug/l. In G105, Fluoranthene and Pyrene were estimated at 3 and 4 ug/l respectively. The sample from G104 showed an estimated value of .016 ug/l of 4,4-DDE.

Although contaminants of concern (contaminants found in Wells #1 and #3) were not present in the monitoring wells, soil samples did reveal Tetrachloroethylene and 1,1,1-Trichloroethane. Sample X103 detected Tetrachloroethylene at

390 ug/kg (ppb). Sample X103 also contained an estimated value for alpha Chlordane at 2.5 ug/kg. Sample X102 showed a value estimated at 2 ug/kg Tetrachloroethylene and, according to IEPA Laboratory Certification, sample X101 revealed an unknown, very similar, if not Tetrachloroethylene estimated at 42 ug/kg. The background sample, X104, however, also showed an estimated value of Tetrachloroethylene at 3 ug/kg and Arochlor 1260 was detected at 380 ug/kg. Values estimated at 2 ug/kg (ppb) of Methylene Chloride were found in soil samples X101 and X102. Trichloroethene was estimated in samples X101 and X102 at 1 and 3 ug/kg respectively. Sample X102 had an estimated value for Chloroform at 98 ug/kg.

IEPA file L1798010008 of the PRP, indicates that Tetrachloroethylene, 1,1,1-Trichloroethane, Trichloroethene and Methylene Chloride were regularly used and stored on the property from which samples X101-103 were taken.

Illinois American Wells #1 & #3
ILD 981958291

TABLE 4-1
SUMMARY

SAMPLING POINT	G101 07-25-89	G102 07-25-89	G103 07-25-89	G104 07-25-89	G105 07-25-89	X101 07-25-89	X102 07-25-89	X103 07-25-89	X104 07-25-89
PARAMETER									
VOLATILES (ppb)									
Methylene Chloride	--	--	--	--	--	2 J	2 J	--	--
Acetone	--	240 D	1700 D	--	13	--	19 J	61 J	3 J
Chloroform	--	--	--	--	--	--	98 J	--	--
2-Butanone (MEK)	10 R	50 R	500 R	10 R	10 R	12 R	6 R	60 R	11 R
Trichloroethene	--	--	--	--	--	1.0 J	3.0 J	--	--
Benzene	3.0 J	--	--	--	--	--	--	--	--
Tetrachloroethene	--	--	--	--	--	--	2 J	390	3.0 J
Unknown	--	--	--	--	--	42 J	--	--	--
SEMIVOLATILES (ppb)									
Diethylphthalate	1.0 J	--	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	--	--	--	210 J
Anthracene	--	--	--	--	--	--	--	--	37 J
Fluoranthene	--	--	--	--	3 J	--	--	--	--
Pyrene	--	--	--	--	4 J	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	--	--	--	230 J
Chrysene	--	--	--	--	--	--	--	--	190 J
bis(2-Ethylhexyl)phthalate	--	--	--	--	--	--	--	160 J	--
PESTICIDES (ppb)									
alpha-Chlordane	--	--	--	--	--	--	--	2.5 J	--
Aroclor-1260	--	--	--	--	--	--	--	--	380
4,4-DDE	--	--	--	.016J	--	--	--	--	--

Illinois American Wells #1 & #3
ILD 981958291

TABLE 4-1
SUMMARY

SAMPLING POINT	G101 07-25-89	G102 07-25-89	G103 07-25-89	G104 07-25-89	G105 07-25-89	X101 07-25-89	X102 07-25-89	X103 07-25-89	X104 07-25-89
PARAMETER									
INORGANICS (water-ppb...soil-ppm)									
Aluminum	--	--	--	--	--	7100	6700	1200	6500
Antimony	--	--	--	--	--	--	--	--	0.9 B
Arsenic	--	--	10.0	--	--	3.7	2.6	1.1 B	4.4
Barium	73 B	84 B	73 B	82 B	77 B	59	93	28	62
Beryllium	--	--	--	--	--	0.4 B	0.7 B	--	0.5 B
Cadmium	--	--	--	--	--	--	0.4 B	--	0.9
Calcium	98000	101000	119000	99000	94000	1400	2000	3000	5200
Chromium	5.7 B	5.5 B	3.5 B	5.6 B	4.5 B	19	16	2.5	10
Cobalt	--	--	--	--	--	4.2 B	3.6 B	--	4.9 B
Copper	2.9 B	--	--	--	--	7.6	8.6	3.5 B	12
Iron	--	37 B	--	--	--	10000	10800	1200	12300
Lead	34	4	4 B	2 B	28 B	3.2	12	--	65
Magnesium	38000	41000 B	39000	39000	3900	1340	940	310 B	3200
Manganese	2	1.4	41	7.5	2.5 B	300	290	8.7	420
Mercury	--	0.1	0.1	--	--	--	0.0	--	0.1
Nickel	4.7	8.4 B	52	--	--	9.6	4.4 B	--	11
Potassium	2000 B	--	3800 B	900 B	900 B	320 B	350 B	390 B	340 B
Silver	--	2.3	--	--	--	--	--	--	--
Sodium	20000	--	21000	18000	18000	--	710	1100	--
Vanadium	--	--	--	--	--	15	15	--	--
Zinc	--	--	--	--	--	37	120	6.5	98
Sulfate	82000	91000	98000	79000	73000	--	--	--	--
FIELD TESTS									
Temperature (degrees F)	57.7	58.3	59.7	58.6	60.4				
Sp. Conductivity (umhos)	939	970	1071	919	925				
Ph	7.8	7.7	7.8	7.3	8.0				

U.S.E.P.A. DEFINED DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
• U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
• J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
• C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
• B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
• D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	not used

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
• E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference
• A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
• M	not used	Duplicate injection (a QC para [illegible]) not met.
• N	not used	Spiked sample (a QC parameter) recovery not within control limits.
• S	not used	The reported value was determined by the Method of Standard Additions (MSA).
• W	not used	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
• *	not used	Duplicate analysis (a QC parameter) not within control limits.
• +	not used	Correlation coefficient for MSA QC parameter) is less than 0.5

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
• P	not used	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
• CV	not used	Method qualifier indicates analysis by Cold Vapor AA.
• AV	not used	Method qualifier indicates analysis by Automated Cold Vapor AA
• AS	not used	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
• T	not used	Method qualifier indicates Titrimetric analysis.
• NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
• R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

5. DISCUSSION OF MIGRATION PATHWAYS

5.1 INTRODUCTION

This section discusses data and information that apply to potential migration pathways and targets of TCL compounds that may be attributable to the facilities that are believed to be contributing to the contamination of Illinois American Wells #1 & #3.

The four migration pathways of concern are groundwater, surface water, air and on-site exposure.

5.2 GROUNDWATER

Illinois American Water Company Wells #1 and #3 (approximately 150 feet apart) have shown sporadic hits of 1,1,1-Trichloroethane and Tetrachloroethylene, while Well #2, approximately 600 feet west of Well #1, has shown no contaminants. Well #2, 30 feet east of Mechanic Street and 50 feet north of Fayette, is screened in the same aquifer from 45.4 to 91.2 feet. Although groundwater samples collected from the 5 monitor wells during the July 25, 1989 SSI detected no contaminants of concern, samples taken of the public wells indicate an observed release to groundwater.

The boring logs generated during the installation of monitor wells indicate the soils in the unsaturated zone consist primarily of sand and gravel deposits. The high permeability associated with sandy deposits combined with the low Koc value (346) of Tetrachloroethylene would facilitate the migration of contaminants from the soil to the

groundwater. The organic carbon coefficient (Koc) indicates the tendency of organic chemical to be absorbed by soils and is a significant environmental fate determinant for all exposure pathways, especially aqueous pathways (EPA, 1986).

As stated in the introduction, Illinois American Water Company Wells #1 and #3 are 2 of 8 wells which supply 33,967 Pekin residents with water. Groundwater for the eight wells is withdrawn from the Sankoty Sand Aquifer.

5.3 SURFACE WATER

No surface water samples were collected during the July 25, 1989 Screening Site Inspection. The Illinois River is about 2000 feet west of the site. There may be a potential for surface water contamination from run-off, however, do to the relatively flat topography in the immediate area, surface water is quickly absorbed in the highly permeable soils. In the area of the soil samples, an intermittent ditch exists on the east end of the former PRP's facility near the R.R. tracks.

5.4 AIR

No documented releases to the air were observed during the SSI. An HNU was used to screen the monitor well head space and soil samples. On sample X103, the HNU read 100 meter units above background when placed at the opening of the hole. The HNU read background levels in the breathing zone. When IEPA personnel sampled the PRP's facility on March 7, 1986 [PCE detected at 3 ug/g (ppm) under a turned over drum], it was noted in the sample form that "Soil was

giving off vapors".

5.5 ON-SITE EXPOSURE

On-site exposure is of concern at the PRP (the former Valley Chemical and Solvents' facility) because contamination was found earlier in areas at less than two feet deep. A fence exists at the north and south ends of the property only. During the SSI, kids were noticed crossing the PRP's site.

6. BIBLIOGRAPHY

Illinois Department of Energy and Natural Resources, State Water Survey, water well records of wells in Tazewell County, T.24N. R.5W. and T.25N. R.5W.

Illinois Environmental Protection Agency, 1987, Potential Hazardous Waste Site Preliminary Assessment for Illinois American Water Company Wells #1 and #3, ILD981958291, prepared by the Hydrogeologic Investigation Unit, Springfield, Il.

Illinois Environmental Protection Agency Division of Public Water Supplies, file for Pekin Public Water Supply System.

U.S.EPA, Office of Solid Waste and Emergency Response, February 12, 1988, Pre-Remedial Strategy for Implementing SARA, Directive number 9345.2-01, Washington, D.C.

United States Geological Survey, 1979, Pekin, IL Quadrangle 7.5 Minute Series Topographic Map.

APPENDIX A

SITE 4-MILE RADIUS MAP

SDMS US EPA Region V

Imagery Insert Form

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4-MILE RADIUS MAP

☐ **Other:**

APPENDIX B

USEPA FORM 2070-13

L179000000/Tazewell County
Illinois American Water Company
Wells #1 & #3

ILD 981958291

Site Inspection Report

1790000000

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Illinois American Water Co. Wells #1 and #3	328 Broadway

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Pekin	IL	61554	Tazewell	179	18

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40 34 00.5	89 39 02.5	■ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
07 25 89 (MONTH DAY YEAR)	■ ACTIVE ☐ INACTIVE	#1 1926 / #3 1937 — Present (BEGINNING YEAR / ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
■ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Timothy J. Murphy	Environmental Protection Specialist	IEPA	(217) 785-5737

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Greg Dunn	"	"	(217) 782-6760
Gary Reside	"	"	( ) "
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Larry Homerin	Mayor	400 Margaret St., Pekin	(309) 477-2300
Dick Tatlock	Production Superintendent	328 Broadway, Pekin	(309) 346-2172
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	8:00 AM - 4:20 pm	Sunny, hot

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
		( )

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Timothy J. Murphy	IEPA	RPMS	(217) 782-6760	9 28 89 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	981958291

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ *(Specify)*
- ☐ E. SLURRY
- ■ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE *(Measures of waste quantities must be independent)*

TONS _____
CUBIC YARDS UNKNOWN
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

- ■ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ■ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	UNKNOWN		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
	See				
	Table				
	2-1				
	in				
		Report			

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA Division of Public Water Supplies file 1795040

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	981958291

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ■ OBSERVED (DATE: 1/13/86) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 33,967 — 04 NARRATIVE DESCRIPTION

1,1,1 - Trichloroethane (1,1,1-TCA) and Tetrachloroethylene (PCE) have been detected in each well on at least 2 separate occasions

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None documented or observed

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None documented or observed

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None documented or observed

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None documented or observed

01 ■ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: UNKNOWN (Acres) — 04 NARRATIVE DESCRIPTION

Potential soil contamination at source of contamination with a confirmed hit (soil contamination) at a nearby PRP

01 ■ G. DRINKING WATER CONTAMINATION — 02 ■ OBSERVED (DATE: 1/13/86) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 33,967 — 04 NARRATIVE DESCRIPTION

See A. above

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None documented or observed

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ■ OBSERVED (DATE: 1/13/86) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 33,967 — 04 NARRATIVE DESCRIPTION

See A. above

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*
None documented or observed

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed

01 ■ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: UNKNOWN — 04 NARRATIVE DESCRIPTION
Wastes dumped on ground at Nearby PRP

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None documented or observed

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
UNKNOWN

01 ■ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
See M. above

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 33,967

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*

Illinois EPA DPWS file 1795040
Illinois EPA DLPC file 1798010008
Illinois EPA SSI of IL-AM Water Co. Wells 1+3

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify) PWS	1795040			IEPA PWS #
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ■ A. BUILDINGS ON SITE

Well houses

06 AREA OF SITE

UNKNOWN (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ■ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

IEPA DPWS file 1795040

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ■	A. ☐	B. ■	C. ☐	A. 0 (mi)
NON-COMMUNITY	C. ☐	D. ☐	D. ☐	E. ☐	F. ☐	B. (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

■ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 33,967

03 DISTANCE TO NEAREST DRINKING WATER WELL 0 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
29 (ft)	See section 3-5 of report	20 (ft)	4,500,000 (gpd)	■ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)
See section 2-1 of report

10 RECHARGE AREA: ■ YES ☐ NO — COMMENTS rainwater infiltrates

11 DISCHARGE AREA: ☐ YES ☐ NO — COMMENTS Illinois River ?

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ■ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Illinois River	☐	.3 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 15,000 NO. OF PERSONS	B. 30,000 NO. OF PERSONS	C. 35,000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: .0095 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: 13,500

04 DISTANCE TO NEAREST OFF-SITE BUILDING: .0095 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)
Wells are located near the central part of Pekin near commercial and residential areas.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE *(Check one)*

■ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK *(Check one)*

☐ A. IMPERMEABLE *(Less than 10^{-6} cm/sec)* ■ B. RELATIVELY IMPERMEABLE *($10^{-4} - 10^{-6}$ cm/sec)* ☐ C. RELATIVELY PERMEABLE *($10^{-2} - 10^{-4}$ cm/sec)* ☐ D. VERY PERMEABLE *(Greater than 10^{-2} cm/sec)*

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
100-150 (ft)	9' at PRP (ft)	UNKNOWN

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
36 (in)	2.5 (in)	<3 %	Varies	2.5 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS *(5 acre minimum)*

ESTUARINE: A. NA (mi) OTHER: B. NA (mi)

12 DISTANCE TO CRITICAL HABITAT *(of endangered species)*

_____ (mi)

ENDANGERED SPECIES: UNKNOWN

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0 (mi)	B. .0095 (mi)	C. 1.0 (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

See maps in report

VII. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

USGS 7.5 min topo map series, 1979 Pekin, IL Quadrange
Illinois State Geological Survey, Well logs from Sections 1-3, 9, 10 of R5W, T24N
HRS Users Manual (contains climatic information)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	5	IEPA Labs in Springfield + Champaign, IL	available in report
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	4	"	"
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Groundwater levels	see QAPP
temp, pH, cond	w/ meter

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ■ AERIAL

02 IN CUSTODY OF IEPA, USEPA (Name of organization or individual)

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS in report

V. OTHER FIELD DATA COLLECTED *(Provide narrative description)*

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA SSI

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Illinois American Water Co.		328 Broadway P.O. Box 1209		Pekin	IL	61554

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
Illinois American Water Co.		P.O. Box 1761 24 Bellevue Park Plaza		Belleville	IL	62223

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

IEPA DPWS file 1795040

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER
Illinois American Water Company	

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
P.O. Box 1209 328 Broadway	

05 CITY	06 STATE	07 ZIP CODE
Pekin	IL	61554

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER
Illinois American Water Company	

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
P.O. Box 1761 24 Bellevue Park Plaza	

14 CITY	15 STATE	16 ZIP CODE
Belleville	IL	62223

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA DPWS file 1795040

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
ILD	981958291

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER	
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE	03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA DPWS file 1795040

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA DPWS file 1795040

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
ILD	981958291

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

NA

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

IEPA DLPC + DPWS files

APPENDIX C

TARGET COMPOUND LlST

TARGET COMPOUND LIST

Volatile Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. chloromethane	10 ug/l	10 ug/kg
2. bromomethane	10	10
3. vinyl chloride	10	10
4. chloroethane	10	10
5. methylene chloride	5	5
6. acetone	10	10
7. carbon disulfide	5	5
8. 1,1-dichloroethene	5	5
9. 1,1-dichloroethane	5	5
10. t-1.2-dichloroethene	5	5
11. 1,2-dichloropropane	5	5
12. chloroform	5	5
13. 1,2-dichloroethane	5	5
14. 2-butanone	10	10
15. 1,1,1-trichloroethane	5	5
16. carbon tetrachloride	5	5
17. vinyl acetate	10	10
18. dichlorobromomethane	5	5
19. c-1,3-dichloropropene	5	5
20. trichloroethene	5	5
21. benzene	5	5
22. chlorodibromomethane	5	5
23. 1,1,2-trichloroethane	5	5
24. t-1,3-dichloropropene	5	5
25. 2-chloroethyl vinyl ether	10	10
26. bromoform	5	5
27. 2-hexanone	10	10
28. 4-methyl-2-pentanone	10	10
29. 1,1,2,2-tetrachloroethane	5	5
30. tetrachloroethene	5	5
31. toluene	5	5
32. chlorobenzene	5	5
33. ethylbenzene	5	5
34. styrene	5	5
35. total xylenes	15	15

CRDL - Contract Required Detection Limit

Base/Neutral Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. Hexachloroethane	10 ug/l	330 ug/kg
2. Bis (2-chloroethyl) ether	10	330
3. Benzyl Alcohol	10	330
4. Bis (2-chloroisopropyl) ether	10	330
5. N-nitrosodi-n-propylamine	10	330
6. Nitrobenzene	10	330
7. Hexachlorobutadiene	10	330
8. 2-Methylnaphthalene	10	330
9. 1,2,4-trichlorobenzene	10	330
10. Isophorone	10	330
11. Naphthalene	10	330
12. 4-Chloroaniline	10	330
13. Bis (2-chloroethoxy) methane	10	330
14. Hexachlorocyclopentadiene	10	330
15. 2-chloronaphthalene	10	330
16. 2-Nitroaniline	50	1600
17. Acenaphthylene	10	330
18. 3-Nitroaniline	50	1600
19. Acenaphthene	10	330
20. Dibenzofuran	10	330
21. Dimethylphthalate	10	330
22. 2,6-Dinitrotoluene	10	330
23. Fluorene	10	330
24. 4-Nitroaniline	50	1600
25. 4-Chlorophenyl-phenyl ether	10	330
26. 2,4-Dinitrotoluene	10	330
27. Diethylphthalate	10	330
28. N-Nitrosodiphenylamine	10	330
29. Hexachlorobenzene	10	330
30. Phenanthrene	10	330
31. 4-Bromophenyl-phenyl ether	10	330
32. Anthracene	10	330
33. Dibutylphthalate	10	330
34. Fluoranthene	10	330
35. Pyrene	10	330
36. Butyl benzyl phthalate	10	330
37. Bis (2-ethylhexyl) phthalate	10	330
38. Chrysene	10	330
39. Benzo (a) anthracene	10	330
40. 3,3'-Dichlorobenzidene	20	660
41. Di-n-octyl phthalate	10	330
42. Benzo (b) fluoranthene	10	330
43. Benzo (k) fluoranthene	10	330
44. Benzo (a) pyrene	10	330
45. Indeno (1,2,3-cd) pyrene	10	330
46. Dibenzo (a,h) anthracene	10	330
47. Benzo (g,h,i) perylene	10	330
48. 1,2-Dichlorobenzene	10	330
49. 1,3-Dichlorobenzene	10	330
50. 1,4-Dichlorobenzene	10	330

Acid Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. Benzoic Acid	50 ug/l	1600 ug/kg
2. Phenol	10	330
3. 2-chlorophenol	10	330
4. 2-nitrophenol	50	1600
5. 2-methylphenol	10	330
6. 2,4-dimethylphenol	10	330
7. 4-methylphenol	10	330
8. 2,4-dichlorophenol	10	330
9. 2,4,6-trichlorophenol	10	330
10. 2,4,5-trichlorphenol	50	1600
11. 4-chloro-3-methylphenol	10	330
12. 2,4-dinitrophenol	50	1600
13. 2-methyl-4,6-dinitrophenol	50	1600
14. Pentachlorophenol	50	1600
15. 4-nitrophenol	50	1600

Pesticide Target Compounds

Compound	Water CRDL	Soil/Solid CRDL
1. alpha-BHC	.05 ug/l	8.0 ug/kg
2. beta-BHC	.05	8.0
3. delta-BHC	.05	8.0
4. Lindane (gamma-BHC)	.05	8.0
5. Heptachlor	.05	8.0
6. Aldrin	.05	8.0
7. Heptachlor epoxide	.05	8.0
8. Endosulfan I	.05	8.0
9. 4,4'-DDE	.10	16.0
10. Dieldrin	.10	16.0
11. Endrin	.10	16.0
12. 4,4'-DDD	.10	16.0
13. Endosulfan II	.10	16.0
14. 4,4'-DDT	.10	16.0
15. Endrin aldehyde	.10	16.0
16. Endosulfan sulfate	.10	16.0
17. Methoxychlor	.50	80.0
18. Chlordane	.50	80.0
19. Toxaphene	.50	80.0
20. Arochlor-1016	1.0	160.0
21. Arochlor-1221	.50	80.0
22. Arochlor-1232	.50	80.0
23. Arochlor-1242	.50	80.0
24. Arochlor-1248	.50	80.0
25. Arochlor-1254	1.0	160.0
26. Arochlor-1260	1.0	160.0

Inorganic Target Compounds

Metals Analyses (CRDL)-ug/l*	
Aluminum	200
Antimony	60
Arsenic	10
Barium	200
Beryllium	5
Cadmium	5
Chromium	10
Cobalt	50
Copper	25
Iron	100
Lead	5
Manganese	15
Mercury	0.2
Nickel	40
Selenium	5
Silver	10
Thallium	10
Vanadium	50
Zinc	20

Other Inorganics
Cyanide
Sulfide
~~Phenols~~
~~Nitrogen-Ammonia~~
~~Nitrogen, Total Kjeldahl~~
~~Nitrogen-Nitrate~~
~~Boron~~
~~pH~~
Sulfate

*Any analytical method specified in the Quality Assurance Project Plan (QAPP) may be utilized as long as the documented instrument or method detection limits meet the Contract Required Detection Level requirements. Higher detection levels may only be used in the following circumstance:

If the sample concentration exceeds two times the detection limit of the instrument or method in use, the value may be reported even though the instrument or method detection limit may not equal the CRDL. This is illutrated in the example below:

For lead:

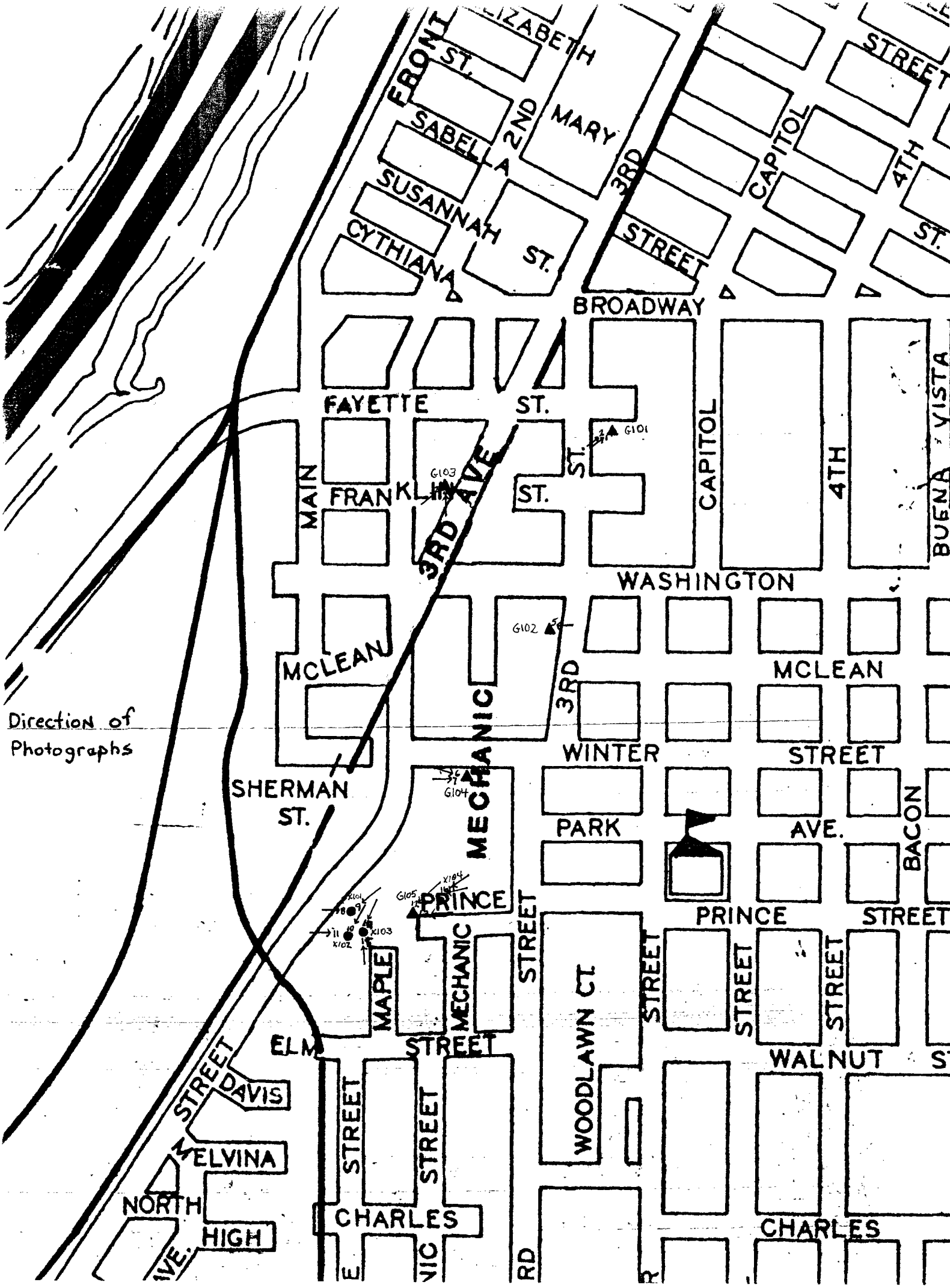
Method in use -- ICP
Instrument Detection Limit (IDL) = 40
Sample Concentration = 85
Contract Required Detection Level (CRDL) = 5

The value of 85 may be reported even though instrument detection limit is greater than required detection level. The instrument or method detection limit must be documented as described in Form IIIX.

These CRDL are the instrument detection limits obtained in pure water that must be met using ICP/Flame AA or Furnace AA. The detection limits for samples may be considerably higher depending on the sample matrix.

APPENDIX D

IEPA SITE PHOTOGRAPHS


Direction of Photographs
FRONT ST.
ELIZABETH
SABELLA
SUSANNAH ST.
CYTHIANA
2ND
MARY
3RD
STREET
CAPITOL
4TH
ST.
BROADWAY
FAYETTE ST.
FRANKLIN ST.
MAIN
3RD AVE
CAPITOL
4TH
BUENA VISTA
WASHINGTON
MCLEAN
MECHANIC
3RD
WINTER STREET
SHERMAN ST.
PARK AVE.
BACON
PRINCE
PRINCE STREET
MAPLE
MECHANIC STREET
WOODLAWN CT.
STREET
WALNUT
ELM
STREET
DAVIS
MELVINA
NORTH
HIGH
CHARLES
G101
G102
G103
G104
G105
X101
X102
X103
X104

DATE: 7-25-89

TIME: 8:00 AM

Photograph by:

Tim Murphy

Location:

G101, Fayette St.

Pekin, Tazewell Co., IL

Comments: Picture taken toward

the Northeast

1

DATE: 7-25-89

TIME: 8:00 am

Photograph by:

Tim Murphy

Location: G101, Fayette

St., Near IL-AM Water

Co. wells 1 and 3

Comments: Picture taken toward

the Northeast

2

DATE: 7-25-89

TIME: 9:00 AM

Photograph by:

Tim Murphy

Location:

G103, 3rd Ave., Pekin, Tazewell Co., IL

Comments: Picture taken toward the Northeast

3

DATE: 7-25-89

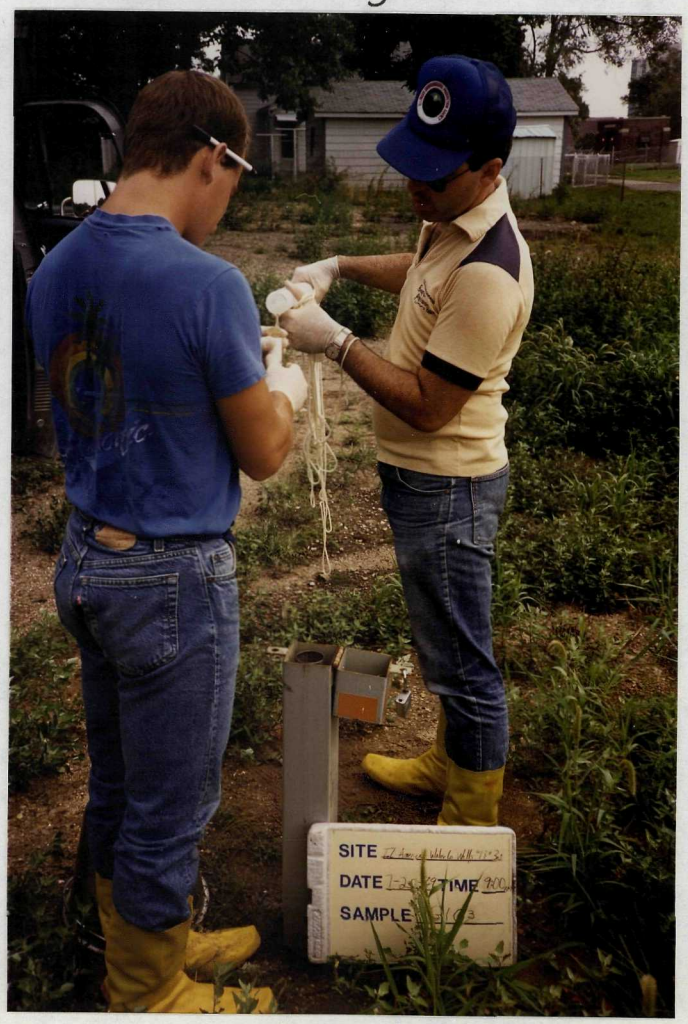
TIME: 9:00am

Photograph by:

Greg Dunn

Location: G103

Comments: Picture taken toward the North



4

IL 532-0603
L/NPC 24 (Rev. 7/86)

DATE: 7-25-89

TIME: 10:10 AM

Photograph by:

Tim Murphy

Location:

G102, 3rd St., Pekin, Tazewell Co., IL

Comments: Picture taken toward the west

5

DATE: 7-25-89

TIME: 11:30 AM

Photograph by:

Gary Reside

Location: G104, Winter St. Pekin, Tazewell Co., IL

Comments: Picture taken toward the east-Southeast

6

DATE: 7-25-89

TIME: 11:30 Am

Photograph by:

Gary Reside

Location:

G104, Winter St., Pekin, Tazewell Co., IL

Comments: Picture taken toward the east

7

DATE: 7-25-89

TIME: 1:00 pM

Photograph by:

Gary Reside

Location: X101, west of G105, Pekin, IL

Comments: Picture taken toward the east. Sample taken in load/unload area of former Valley Chemical facility

8

IL 532-0603
L/NPC 24 (Rev. 7/86)

DATE: 7-25-89

TIME: 1:00 PM

Photograph by:

Tim Murphy

Location:

X 101, west of G105, Pekin

Tazewell Co, IL

Comments: Picture taken toward

the Southwest

9

DATE: 7-25-89

TIME: 1:20 PM

Photograph by:

Tim Murphy

Location: X 102, Pekin, IL

Comments: Picture taken toward

the South-Southwest

on south side of former

Valley Chemical facility

10

DATE: 7-25-89

TIME: 1:20 PM

Photograph by:

Tim Murphy

Location:

X 102, former Valley Chem. facility, Pekin, Tazewell Co., IL

Comments: Picture taken toward the east

11

DATE: 7-25-89

TIME: 1:45pm

Photograph by:

Greg Dunn

Location: G105, the end of Prince St., Pekin, Tazewell Co., IL

Comments: Picture taken toward the southwest

12

IL 532-0603
L/NPC 24 (Rev. 7/86)

DATE: 7-25-89

TIME: 1:45p

Photograph by:

Greg DUNN

Location:

G105, end of Prince St.

Pekin, Tazewell Co., IL

Comments: Picture taken toward the west

13

DATE: 7-25-89

TIME: 1:40 pm

Photograph by:

Greg DUNN

Location: X103, in pit at former Valley Chemical facility, Pekin, IL

Comments: Picture taken toward the south-southwest

14

DATE: 7-25-89

TIME: 1:40 pm

Photograph by:

Greg Dunn

Location:

X 103, Pekin, IL

Comments: Picture taken toward

the North

15

DATE: 7-25-89

TIME: 2:00 PM

Photograph by:

Greg Dunn

Location: X104, Prince St.

Pekin, Tazewell Co., IL

Comments: Picture taken toward

the west-southwest

16

IL 532-0603
L/NPC 24 (Rev. 7/86)

DATE: 7-25-89

TIME: 2:00 pm

Photograph by:

Greg Dunn

Location:

X104 Pekin, IL

Comments: Picture taken toward

the south west

17

DATE:

TIME:

Photograph by:

Location:

Comments: Picture taken toward

APPENDIX E

WELL LOGS AND DATA GENERATED DURING SSI

ILLINOIS-AMERICAN WATER CO. WELLS #1 AND #3

A pump test was conducted Thursday, 3-9-89. Wells #1 and #2 were pumping until 3:00am. At this time both wells were shut down for a 6 hour period. At 9:00am, well #1 was kicked on and pumped at average rate of 1875 gpm. At 4:00pm well #2 was kicked on and the pump test over. Groundwater levels were as follows:

Time	G101	G102	G103
2:30a	430.62	432.14	431.67
3:10a	430.65	432.15	431.67
3:30a	430.72	432.15	431.70
4:00a	430.79	432.16	431.71
4:30a	430.88	432.16	431.75
5:00a	430.94	432.16	431.78
5:30a	431.05	432.16	431.80
6:00a	431.08	432.16	431.82
6:30a	431.14	432.17	431.85
7:00a	431.19	432.17	431.87
7:30a	431.25	432.18	431.89
8:00a	431.29	432.18	431.91
8:30a	431.34	432.20	431.94
9:00a	431.39	432.21	431.95
9:30a	431.34	432.21	431.95
10:00a	431.27	432.21	432.98
10:30a	431.22	432.22	431.99
11:00a	431.19	432.24	432.04
11:30a	431.16	432.24	432.04
12:00a	431.14	432.26	432.05
12:30p	431.12	432.26	432.08
1:00p	431.11	432.28	432.08
1:30p	431.11	432.28	432.10
2:00p	431.09	432.29	432.10
2:30p	431.08	432.29	432.11
3:00p	431.08	432.30	432.12
3:30p	431.07	432.31	432.14
4:00p	431.06	432.31	432.14

Illinois Environmental Protection Agency **Field Boring Log** Page 1 of 1

Site File No.: 1790000000 County Tazewell Boring No. B-3 Monitor Well No. G-101

Site File Name Ill. American Water Co. Wells #1 + #3 / Pekin Surface Elev. _____ Completion Depth 55

Fed. ID. No. _____ Auger Depth 55 Rotary Depth _____

Quadrangle Pekin Sec. 3 T. 24N. R. 5W. Date: Start 1/31/89 Finish 1/31/89 Sunny 70°F

Boring Location On the south side of Fayette St. East of the old third street, east side of alley.

Drilling Equipment CME 75 3¾ inch hollow stem auger

Personnel: G - S. Otto; D - K. Bosie; H - R. Irwin; H -

Elev.	DESCRIPTION	Depth in feet	Sample No.	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA or HNU readings	REMARKS
	0-4 ft. Dark brown Silt (topsoil)							0	
	4-11 ft. Sand med. grain, 15%-20% gravel ranging from 5mm to 3.5cm in size subrounded to rounded. Dark yellowish brown 10YR 4/4.	5						0	
		10						0	
	11-15 ft Sand fine to med. grain, 5% gravel ranging from 5mm to 3cm in size subrounded to rounded, dark yellowish brown 10YR 4/4	15						0	
		20						0	
	15-20 ft. Sand med. to very coarse grain 30%-40% gravel from 5mm to 7mm 5% gravel from 7mm to 2cm subrounded to well rounded, dark yellowish brown 10YR 4/4	25						0	
		30						0	
		35						0	
	20-35 ft. Sand fine grain with 3% gravel ranging from 1.5-2.5cm, dark yellowish brown 10YR 4/4	40						0-5	
		45						0-5	
	35-37 ft. Sand med. grain with some clay, 5% gravel 5-13cm in size subrounded to rounded, dark brown 10YR 4/3	50						0	
		55						0	Boring Complete at 55 ft.
	37-55 ft. Sandy Gravel, 50% of the gravel ranges from 3-5mm 5-10% from 5mm - 3cm 20% med. to coarse grain sand subrounded to well rounded dark brown 10YR 4/3								Measured from AWrod water at 46 ft.

Illinois Environmental Protection Agency **Monitor Well Construction**

County: Tazewell Boring No.: B-3

Site File Name: Ill. American Water Co. Wells #1 + #3/ Pekin Monitor Well No.: G-101

Site File No.: 1790000000 Prepared By: S. Otto

Monitor Well Location On the south side of Fayette St. East of the old 3rd st. east side of alley.

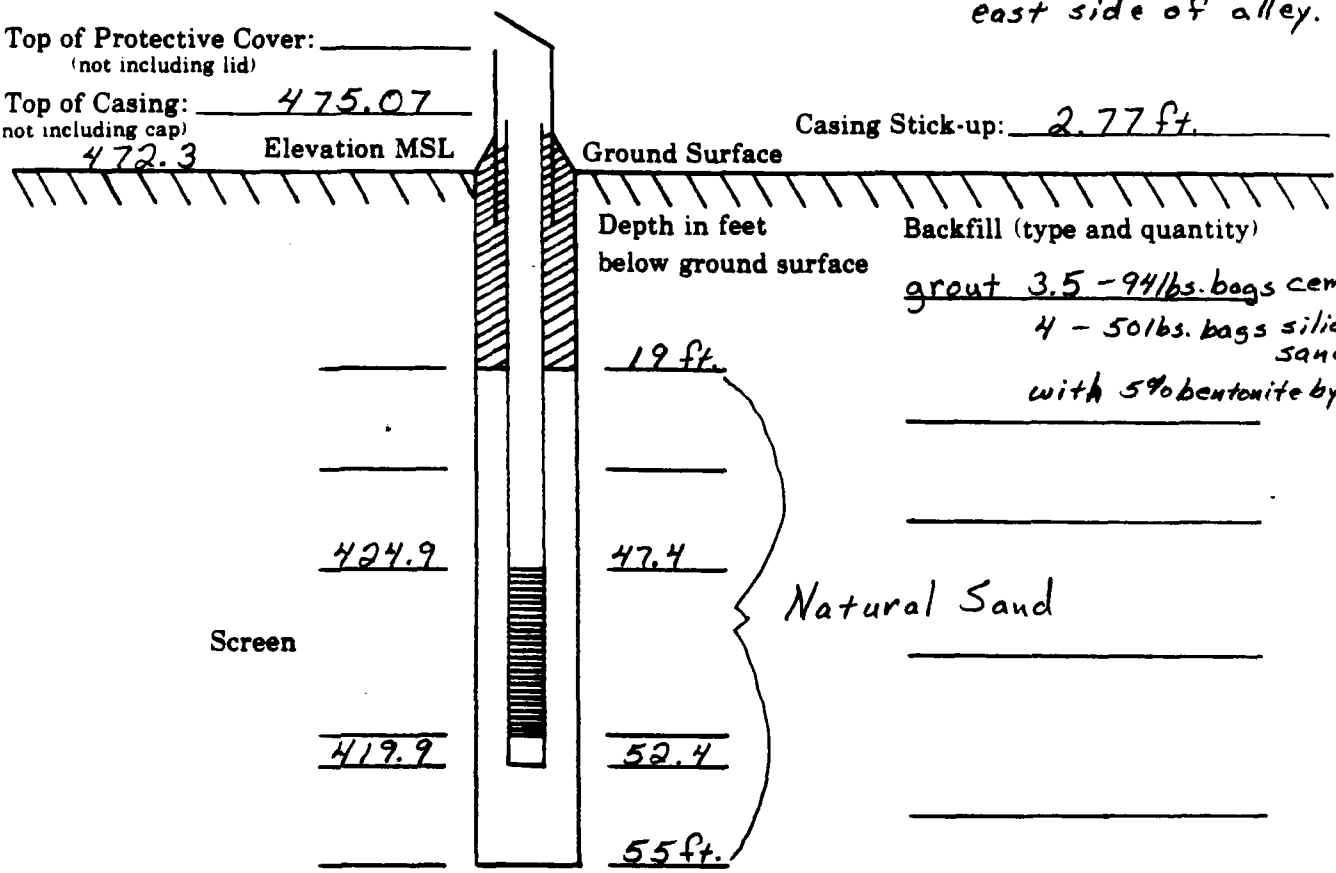
Top of Protective Cover: _____
(not including lid)

Top of Casing: 475.07
(not including cap)

Casing Stick-up: 2.77 ft.

472.3 Elevation MSL

Ground Surface



Backfill (type and quantity)

grout 3.5 - 94lbs. bags cement
4 - 50lbs. bags silica sand
with 5% bentonite by vol.

Casing Type and Size: 2" 304 stainless steel (Mathews)

Screen Type and Size: 2" 304 stainless steel 5 ft. 0.01 slot wire wound

Casing Field Measurements:

bottom of screen _____
top of screen 5.02
1st joint 5.12

5.00	5.00
5.00	5.01
5.01	5.01
5.02	5.00
5.00	4.97

Total Length of Casing 55.14 ft.

Plug (type) Flat, attached to screen

Cap (type) Stainless slip on

Protective Cover (type and size) BK 4" square x 5 ft.

Illinois Environmental Protection Agency **Field Boring Log** Page 1 of 1

Site File No.: 1790000000 County Tazewell Boring No. B-2 Monitor Well No. G-102

Site File Name Ill. American Water Co. Wells #1 + #3 / Pekin Surface Elev. _____ Completion Depth 45

Fed. ID. No. _____ Auger Depth 45 Rotary Depth _____

Quadrangle Pekin Sec. 3 T. 24N R. 5W Date: Start 1/31/89 Finish 1/31/89

Boring Location Southwest corner of Washington St. and old 3rd Street

Drilling Equipment CME 75 3 3/4 inch hollow stem auger

Personnel: G - S. Otto; D - K. Bosie; H - R. Irwin; H -

Elev.	DESCRIPTION	Depth in feet	Sample No.	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA or HNU readings	REMARKS
	0-5 ft. Dark brown silt (top soil)							3-4	Background OVA 1
	5-10 ft. Sand fine grain, poorly graded. Yellowish brown 10YR 5/6	5						2-3	
		10						1-2	
	10-14 ft. Sand fine to med. grain with 15% gravel ranging from 3mm to 3cm in size, subrounded to rounded, Dark yellowish brown 10YR 4/6	15						1-10	probably from acetone spray from decon.
		20						1-2	Driller notes from 23-25ft tighter drilling
	14-23 ft. Sand med. to coarse grain with 15%-20% gravel ranging from 3mm to 3.5cm in size, subrounded to rounded, Dark yellowish brown 10YR 3/4. Very moist at 23ft.	25						1-2	
		30						1-3	
		35						1-15	Vapors from bore hole
	23-39 ft. Sand same as above with some clay, more gray in color 10YR 4/2 dark grayish brown	40						1-15	
	39-45 ft. Clayey Sand med. to coarse grain 20%-25% clay with some gravel up to 2.5cm in size, subrounded to rounded.	45							Boring Complete at 45 ft. Measured from AW rod, water at 37 ft.

Illinois Environmental Protection Agency **Monitor Well Construction**

County: Tazewell Boring No.: B-2

Site File Name: Ill. American Water Co. Wells #1 + #3/ Pekin Monitor Well No.: G-102

Site File No.: 1790000000 Prepared By: S. Otto

Monitor Well Location South west corner of Washington St. and Old 3rd. Street

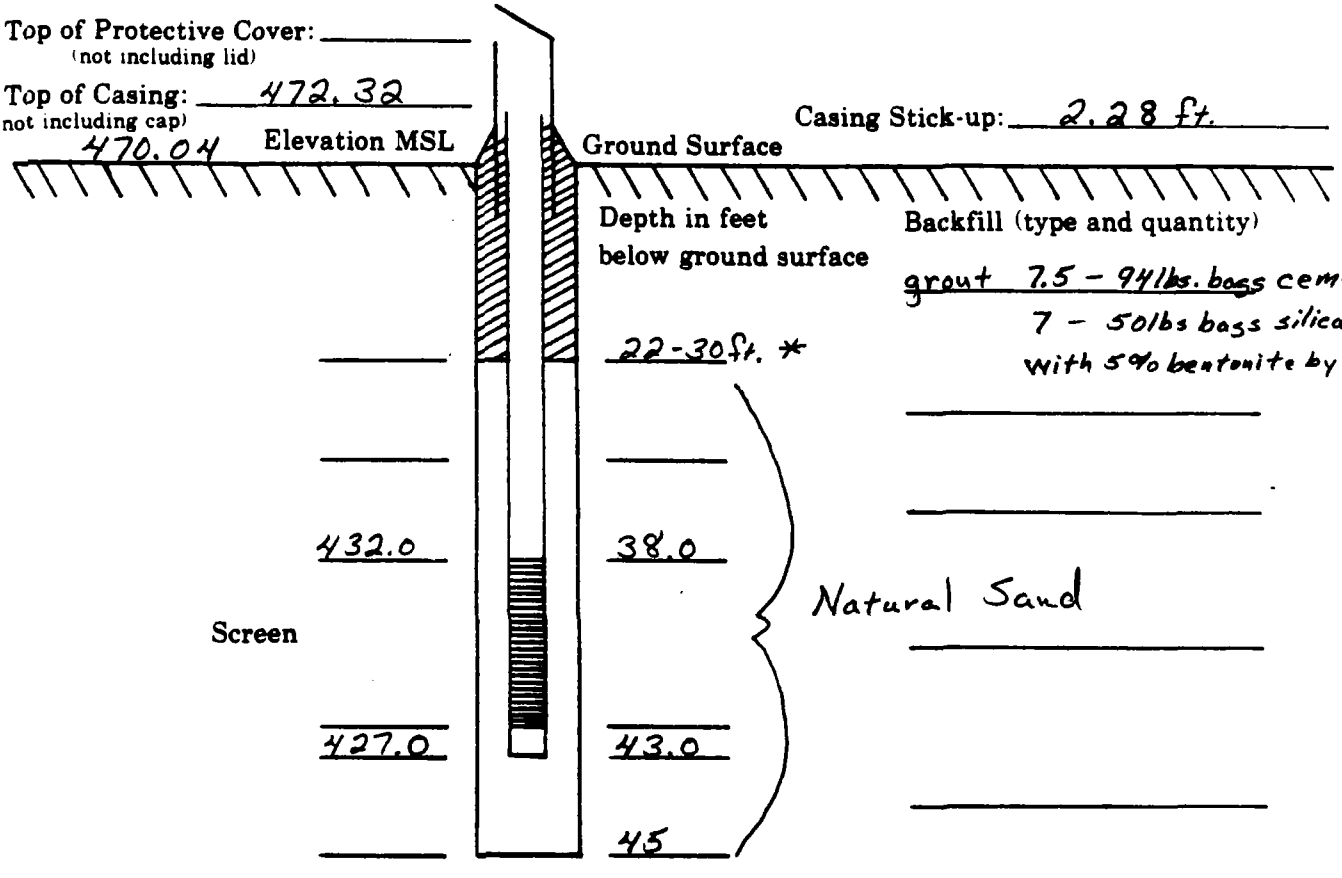
Top of Protective Cover: _____
(not including lid)

Top of Casing: 472.32
(not including cap)

Casing Stick-up: 2.28 ft.

470.04 Elevation MSL

Ground Surface



Depth in feet below ground surface

Backfill (type and quantity)

grout 7.5 - 94lbs. bags cement
7 - 50lbs bags silica sand
with 5% bentonite by vol.

22-30ft. *

432.0 38.0

Natural Sand

Screen

427.0 43.0

45

Casing Type and Size: 2" 304 stainless steel (Mathews)

Screen Type and Size: 2" 304 stainless steel 5ft. 0.01 slot wire wound

Casing Field Measurements:

bottom of screen _____
top of screen 5.03
1st joint 5.12
5.03
5.03 5.03
5.03 5.02
5.01 5.02
5.00

Total Length of Casing 45.29 ft.

Plug (type) Flat attached to screen

Cap (type) stainless slip on

Protective Cover (type and size) BK 4" square x 5ft.

* Prior to grouting, measured depth to slough was 22ft. Since more grout was needed this was probably a bridge.

Illinois Environmental Protection Agency **Field Boring Log** Page 1 of 1

Site File No.: 1790000000 County Tazewell Boring No. B-1 Monitor Well No. G-103

Site File Name Ill. American Water Co. Wells #1 + #3/Pekin Surface Elev. _____ Completion Depth 50ft.

Fed. ID. No. _____ Auger Depth 50ft. Rotary Depth _____

Quadrangle Pekin Sec. 3 T. 24N. R. 5W. Date: Start 1/30/89 Finish 1/30/89

Boring Location 80 ft North of Franklin St. and 30ft west of the centerline of the new 3rd Street

Drilling Equipment CME 75 3 3/4 inch hollow stem auger

Personnel: G - S. Otto; D - K. Bosie; H - R. Irwin; H -

Elev.	DESCRIPTION from cuttings	Depth in feet	Sample No.	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA or HNU readings	REMARKS
	0-5ft. Dark brown silty fill material at 5ft. wood chips.	0						1-2	
	5-7ft. Sand med. to coarse grain with 10-15% gravel, 2-10mm in size trace silt	5						1-2	
	7-14ft. Sand med. grain with trace gravel 2-5mm in size and trace silt. Dark yellowish brown 10YR 4/6	10						1-2	
		15						1-2	
		20						1-2	
	14-35ft. Same as 5-7ft. at 17ft becomes moist and grades into same as 7-14ft.	25						1-2	
		30						1-2	
	35-50ft. Sand med. to coarse grain with some gravel (about 10%) ranging from 2mm - 3cm in size. trace silt.	35						1-2	
		40						1-2	
		45						8-9	
		50							Boring Complete at 50ft.
	When pulling augers noted a Sandy Gravel from 35-50ft. 50% of the gravel was 3-5mm 5-10% ranged from 5mm - 3cm. subrounded to well rounded. 20% med. to coarse grain sand. Brown 10YR 4/3.								

Illinois Environmental Protection Agency **Monitor Well Construction**

County: Tazewell Boring No.: B-1

Site File Name: Ill. American Water Co. Wells #1 + #3 Monitor Well No.: G-103

Site File No.: 1790000000 Prepared By: S. Otto

Monitor Well Location 80 ft. north of Franklin St. and 30 ft. west of the center line of the new 3rd street.

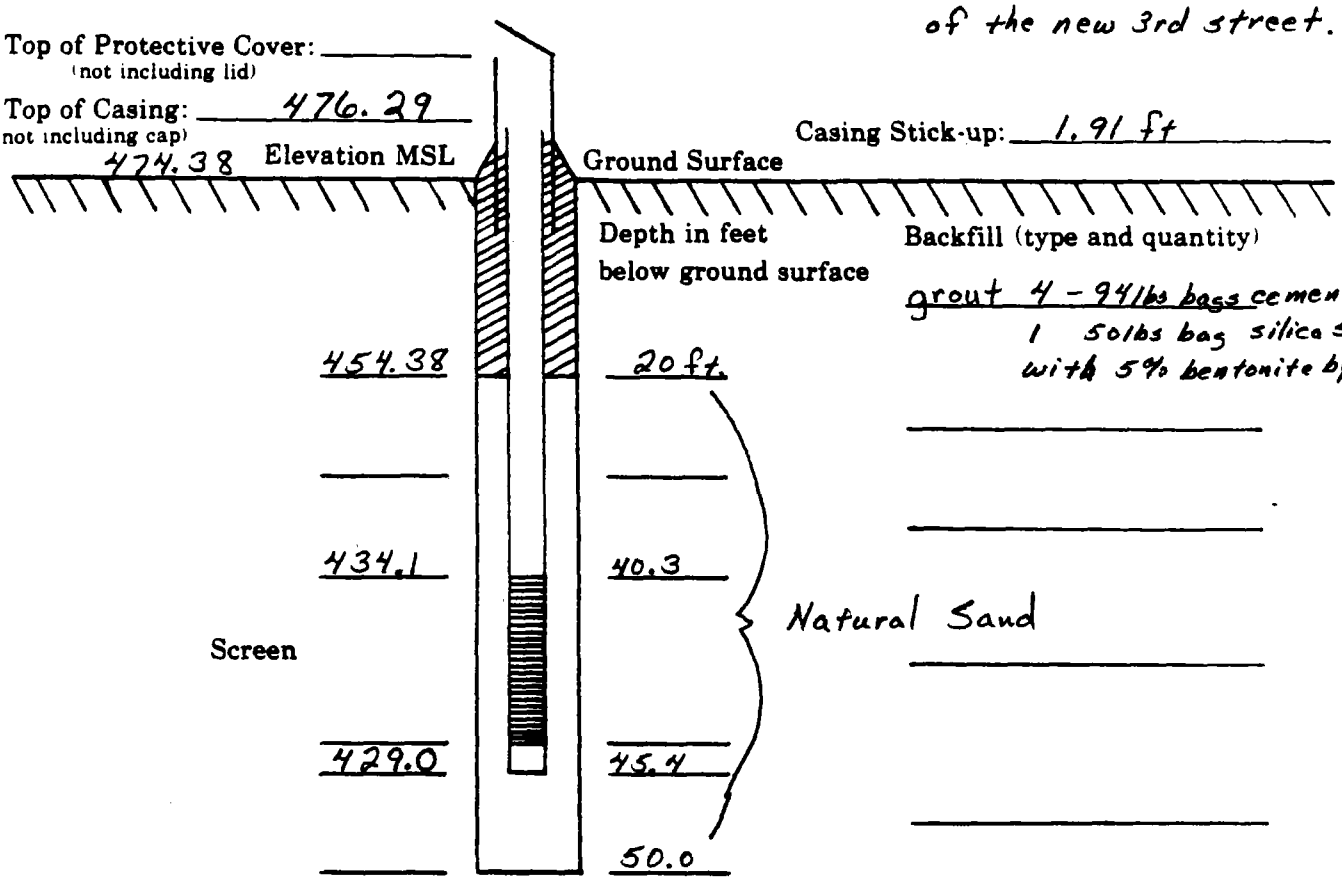
Top of Protective Cover: _____
(not including lid)

Top of Casing: 476.29
(not including cap)

Casing Stick-up: 1.91 ft

474.38 Elevation MSL

Ground Surface



Casing Type and Size: 2" 304 stainless steel (Mathews)

Screen Type and Size: 2" 304 stainless steel 5 ft. 0.01 slot wire wound

Casing Field Measurements:

bottom of screen		
top of screen	5.04	
1st joint	5.26	
	10.00	
	5.00	5.02
	5.03	5.02
	5.01	1.91
	5.01	

Total Length of Casing 47.26 ft.

Plug (type) Flat, attached to screen

Cap (type) stainless slip on

Protective Cover (type and size) BK 4" square × 5 ft.

Illinois Environmental Protection Agency **Field Boring Log** Page 1 of 1

Site File No.: 1790000000 County Tazewell Boring No. B-4 Monitor Well No. G104

Site File Name Ill. American Water Co. Wells #1 + #3/Pekin Surface Elev. 100.35 Completion Depth 65'

Fed. ID. No. Auger Depth 65 Rotary Depth

Quadrangle Pekin Sec. 3 T. 24N R. 5W Date: Start 7-05-89 Finish 7-05-89

Boring Location

Drilling Equipment CME 75 3¾ inch H.S.A. w/knockout plate

Personnel
G - D. Tolan
D - K. Bosie
H - B. Mathis
H -

Elev.	DESCRIPTION	Depth in feet	Sample No.	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA or HNU readings	REMARKS
	Tan & Brown Sand fine to medium grained w/ some clay & silt	0							Described from cuttings.
	@ 15' Ft. somewhat dirty w/occassional pebble	10							No OVA readings
	w/ gravel throughout	20						No OVA Readings	
		30							
		40							
		50							
		60							
	End of Boring	70							

Illinois Environmental Protection Agency **Monitor Well Construction**

County: Tazewell

Boring No.: B-4

Site File Name: IL American Water Co. Wells 1+3/ Pekin

Monitor Well No.: G104

Site File No.: 1790000000

Prepared By: T.J. Murphy

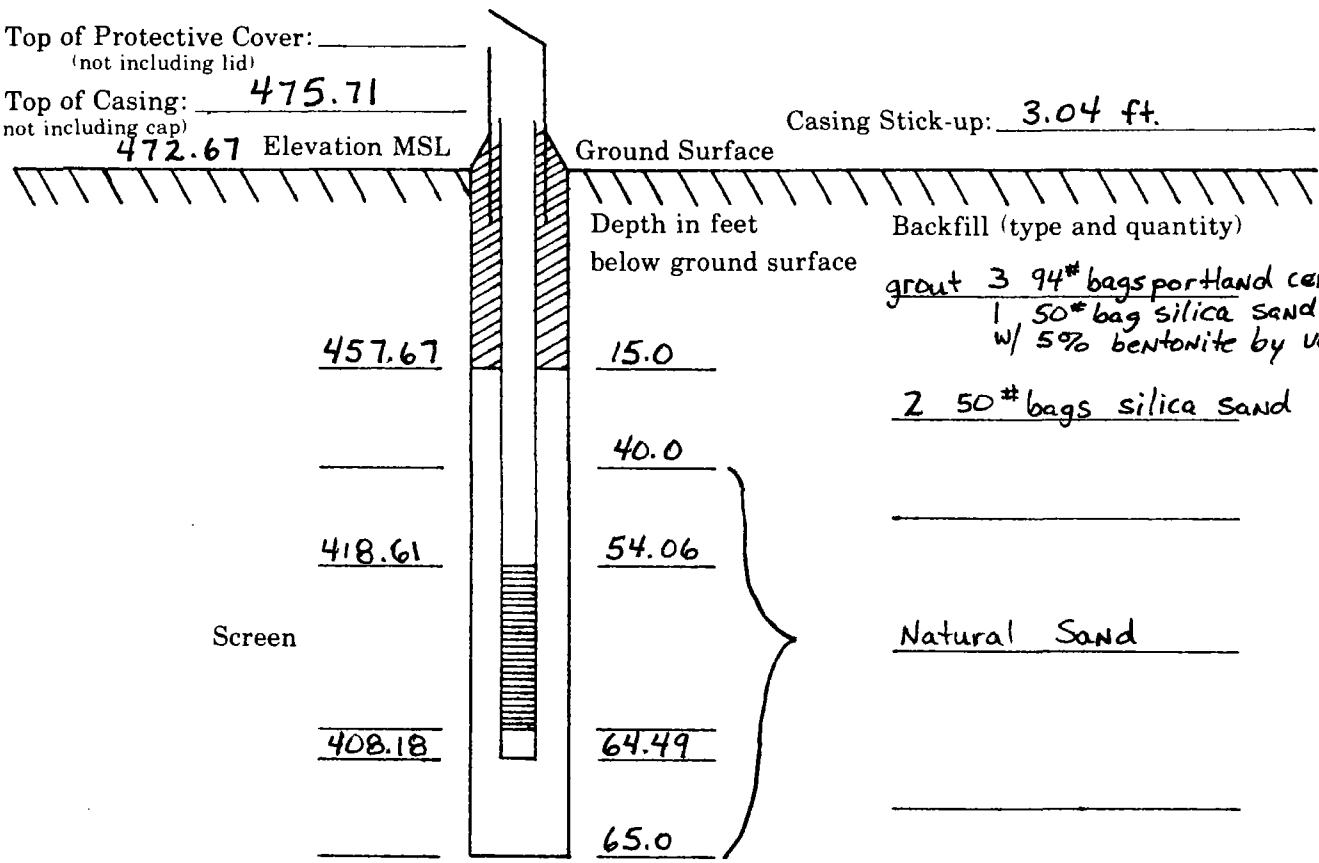
Monitor Well Location South side of Winter St., west of old 3rd St., east of 3rd Ave.

Top of Protective Cover: _____
(not including lid)

Top of Casing: 475.71
(not including cap)

472.67 Elevation MSL

Casing Stick-up: 3.04 ft.



	Depth in feet below ground surface	Backfill (type and quantity)
457.67	15.0	grout 3 94# bags portland cement 1 50# bag silica sand w/ 5% bentonite by vol.
	40.0	2 50# bags silica sand
418.61	54.06	
		Natural Sand
408.18	64.49	
	65.0	

Casing Type and Size: 2" 304 stainless steel (Mathews)

Screen Type and Size: 2" 304 stainless steel 10' 0.01 slot wire wound

Casing Field Measurements:

bottom of screen		
top of screen	10.43	
1st joint	10.50	
	10.02	
	10.03	
	10.03	
	10.03	4.98
	10.03	1.91

Total Length of Casing 67.53 ft

Plug (type) flat, attached to screen

Cap (type) stainless slip-on

Protective Cover (type and size) BK 4" square x 5 ft.

Illinois Environmental Protection Agency **Field Boring Log** Page 1 of 1

Site File No.: 1790000000 County Tazewell Boring No. B-5 Monitor Well No. G105

Site File Name Ill. American Water Co. Wells #1 & #2/Pekin Surface Elev. _____ Completion Depth 60'

Fed. ID. No. _____ Auger Depth 60' Rotary Depth _____

Quadrangle Pekin Sec. 3 T. 24N R. 5W Date: Start 7-05-89 Finish 7-05-89

Boring Location _____

Drilling Equipment CME 75 3 3/4 inch H.S.A. w/knockout plate

Personnel: G - D Tolan; D - Basie; H - B. Mathis; H -

Elev.	DESCRIPTION	Depth in feet	Sample No.	Sample Type	Sample Recovery	Penetrometer	N Values (Blows)	OVA or HNU readings	REMARKS
	Gray to Dark Brown Silty Sand (topsoil)								Described from cuttings
	Redish Brown Sand moist fine to medium grained	5							No OVA readings
	@ 12.5 Ft w/some silt and clay throughout	10							
		15							
		20							
		25							
	@ 30.5 Ft. poorly sorted with coarse sand, pebbles and slight silt & clay throughout	30						No OVA Readings	
		35							
	@ 40.5 Ft somewhat dirty slightly darker color	40							
	@ 45.5 Ft very moist	45							
	@ 50.5 Ft Sand & Gravel clean wet ▼	50							
		55							
	End of Boring	60							

Illinois Environmental Protection Agency **Monitor Well Construction**

County: Tazewell

Boring No.: B5

Site File Name: IL American Water Co. Wells 1+3/ Pekin

Monitor Well No.: G105

Site File No.: 1790000000

Prepared By: T.J. Murphy

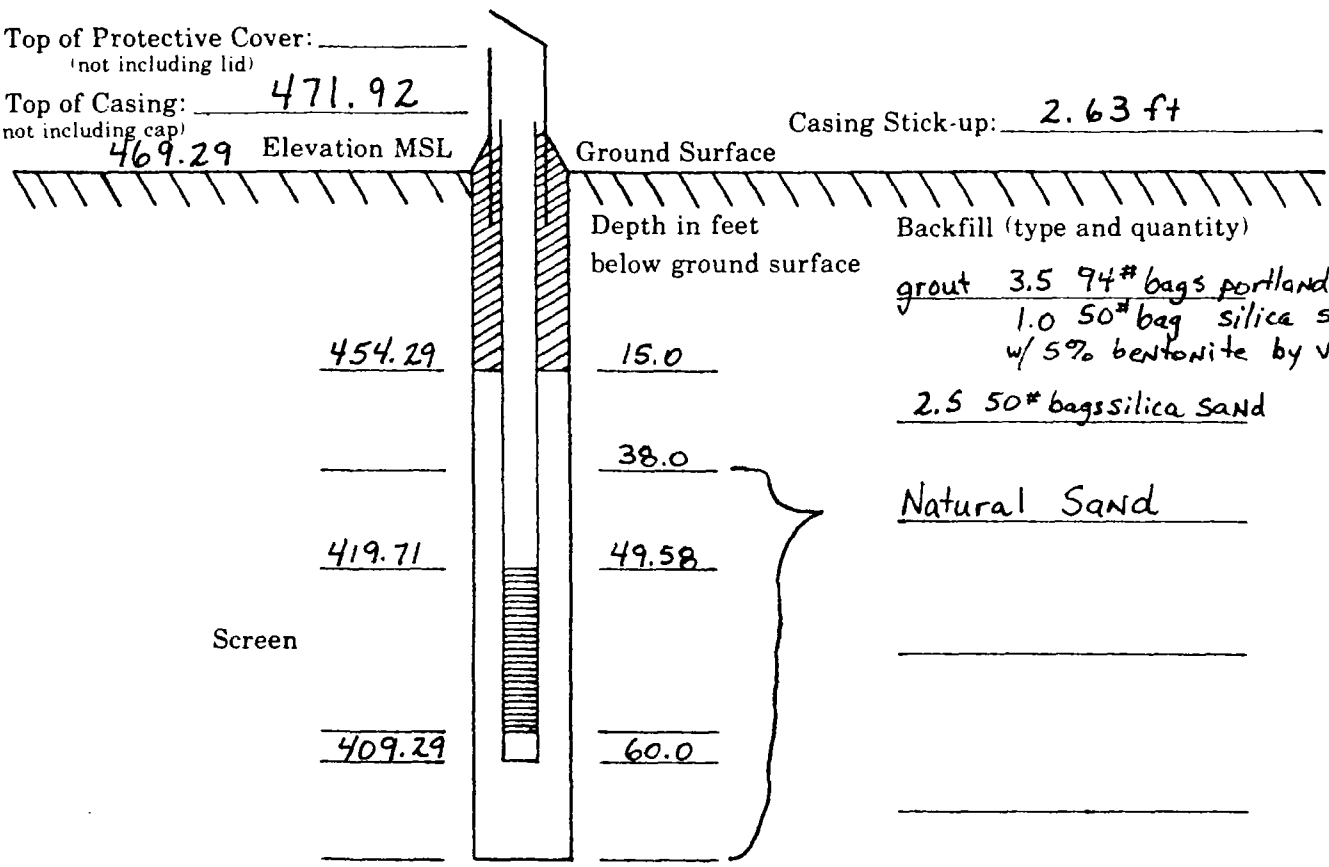
Monitor Well Location end of Prince St.

Top of Protective Cover: _____
(not including lid)

Top of Casing: 471.92
(not including cap)

469.29 Elevation MSL

Casing Stick-up: 2.63 ft



	Depth in feet below ground surface	Backfill (type and quantity)
454.29	15.0	grout 3.5 94# bags portland cem. 1.0 50# bag silica sand w/ 5% bentonite by vol.
	38.0	2.5 50# bags silica sand
419.71	49.58	Natural Sand
409.29	60.0	

Casing Type and Size: 2" 304 stainless steel (Mathews)

Screen Type and Size: 2" 304 stainless steel 10' 0.01 slot wire wound

Casing Field Measurements:

bottom of screen _____
top of screen 10.42
1st joint 10.51
10.05
10.04
10.04
10.04
10.04 1.91

Total Length of Casing 62.63

Plug (type) flat, attached to screen

Cap (type) stainless slip-on

Protective Cover (type and size) BK 4" square x 5 ft.

FIELD SURVEY FORM

LPC #: 1 7 9 0 0 0 0 0 0 -- Tazewell County

Facility Name: IL American Water Co. Wells 1+3/ Pekin ILD #: 9 8 1 9 5 8 2 9 1

Purge Date:	7-25-89	Sample Point ID:	G101
Purge Time:	7:40 am	Casing Vol. (gals.):	1.65
Sample Date:	7-25-89	Vol. Purged (gals.):	9.0
Sample Time:	8:00 am	Sample Method:	teflon bailer

Elevation:	475.07 ft.	Total Well Depth:	55.02 ft.
Water Level:	44.88 ft.	Stick-Up:	2.77 ft.
GW Elevation:	430.19 ft.		

Prior to Purge		During Purging		Post Purge	
Gals. Removed:	2	Gals. Removed:	6	Gals. Removed:	9
Temp. (C):	59.6°F	Temp. (C):	57.4°F	Temp. (C):	57.7°F
pH:	7.85	pH:	7.83	pH:	7.84
Spec. Cond.:	.891x1000	Spec. Cond.:	.932x1000	Spec. Cond.:	.939x1000

Weather Conditions: overcast, humid 79-91°F

Sample Appearance: rusty to clear

Sampler Comments:

TM:tk:4/39/35(8/10/89)

FIELD SURVEY FORM

LPC #: 1 7 9 0 0 0 0 0 0 -- Tazewell County

Facility Name: IL American Water Co. Wells 1+3/Pekin ILD #: 9 8 1 9 5 8 2 9 1

Purge Date:	7-25-89	Sample Point ID:	G102
Purge Time:	10:00 AM	Casing Vol. (gals.):	.679
Sample Date:	7-25-89	Vol. Purged (gals.):	4.0
Sample Time:	10:10 AM	Sample Method:	teflon bailer

Elevation:	472.32 ft.	* Total Well Depth:	45.24 ft.
* Water Level:	41.08 ft.	Stick-Up:	2.28 ft
* GW Elevation:	431.24 ft.		

Prior to Purge		During Purging		Post Purge	
Gals. Removed:	0	Gals. Removed:	2	Gals. Removed:	4
Temp. (C):	58.1°F	Temp. (C):	57.6°F	Temp. (C):	58.3°F
pH:	7.7	pH:	7.77	pH:	7.69
Spec. Cond.:	.971 x1000	Spec. Cond.:	.955x1000	Spec. Cond.:	.97 x1000

Weather Conditions: overcast, humid 79-91°F

Sample Appearance: cloudy

* Sampler Comments: Water level measurements may have slight error due to H_2O level meter tip being broken

TM:tk:4/39/35(8/10/89)

FIELD SURVEY FORM

LPC #: 1 7 9 0 0 0 0 0 0 -- Tazewell County

Facility Name: IL American Water Co. Wells 1+3/Pekin ILD #: 9 8 1 9 5 8 2 9 1

Purge Date:	7-25-89	Sample Point ID:	G103
Purge Time:	8:50 am	Casing Vol. (gals.):	.26
Sample Date:	7-25-89	Vol. Purged (gals.):	2.0
Sample Time:	9:00 am	Sample Method:	teflon bailer

Elevation:	476.29 ft.	* Total Well Depth:	46.81 ft
* Water Level:	45.21 ft.	Stick-Up:	1.91 ft.
* GW Elevation:	431.08 ft.		

Prior to Purge		During Purging		Post Purge	
Gals. Removed:	0	Gals. Removed:		Gals. Removed:	2
Temp. (C):	60.8°F	Temp. (C):		Temp. (C):	59.7°F
pH:	7.59	pH:		pH:	7.82
Spec. Cond.:	1.007x1000	Spec. Cond.:		Spec. Cond.:	1.071x1000

Weather Conditions: overcast, humid 79-91°F

Sample Appearance: rusty orange color

* Sampler Comments: water level meter tip broke off in well and may cause error in H_2O level readings

TM:tk:4/39/35(8/10/89)

FIELD SURVEY FORM

LPC #: 1 7 9 0 0 0 0 0 0 -- Tazewell County

Facility Name: IL American Water Co. Wells 1+3/ Pekin ILD #: 9 8 1 9 5 8 2 9 1

Purge Date:	7-25-89	Sample Point ID:	G104
Purge Time:	11:10 AM	Casing Vol. (gals.):	1.91
Sample Date:	7-25-89	Vol. Purged (gals.):	10
Sample Time:	11:30 AM	Sample Method:	teflon bailers

Elevation:	475.71 ft.	* Total Well Depth:	67.39 ft.
* Water Level:	55.61 ft.	Stick-Up:	3.04 ft.
* GW Elevation:	420.10 ft.		

Prior to Purge		During Purging		Post Purge	
Gals. Removed:	0	Gals. Removed:	6	Gals. Removed:	9
Temp. (C):	58.0°F	Temp. (C):	57.8°F	Temp. (C):	58.6°F
pH:	7.40	pH:	7.5	pH:	7.3
Spec. Cond.:	.891 x 1000	Spec. Cond.:	.88 x 1000	Spec. Cond.:	.919 x 1000

Weather Conditions: overcast, humid 79-91°F

Sample Appearance: clear

* Sampler Comments: Water level measurements may have slight error due to H_2O level meter tip being broken

TM:tk:4/39/35(8/10/89)

FIELD SURVEY FORM

LPC #: 1 7 9 0 0 0 0 0 0 -- Tazewell County

Facility Name: IL American Water Co. Wells 1+3/ Pekin ILD #: 9 8 1 9 5 8 2 9 1

Purge Date:	7-25-89	Sample Point ID:	G105
Purge Time:	1:25pm	Casing Vol. (gals.):	3.88
Sample Date:	7-25-89	Vol. Purged (gals.):	21.0
Sample Time:	1:45pm	Sample Method:	teflon bailer

Elevation:	471.92 ft.	*Total Well Depth:	64.80 ft.
* Water Level:	40.98 ft.	Stick-Up:	2.63 ft
* GW Elevation:	430.94 ft.		

Prior to Purge		During Purging		Post Purge	
Gals. Removed:	0	Gals. Removed:	unk	Gals. Removed:	21
Temp. (C):	57.8°F	Temp. (C):	58.0°F	Temp. (C):	60.4°F
pH:	8.05	pH:	8.05	pH:	8.0
Spec. Cond.:	.898x1000	Spec. Cond.:	.911x1000	Spec. Cond.:	.925x1000

Weather Conditions: overcast, humid 79-91°F

Sample Appearance: clear

* Sampler Comments: Water level measurements may have slight error due to H_2O level meter tip being broken

TM:tk:4/39/35(8/10/89)

APPENDIX F

PRIVATE WELL RECORDS

SWS
Illinois State Water Survey
Telephone (217) 333-221
2204 Griffith Driv
Champaign, Illinois 61820-749

YOU ARE RECEIVING A TELECOPY FROM:

ILLINOIS STATE WATER SURVEY
2204 GRIFFITH DRIVE
CHAMPAIGN, IL 61820

Verfication # -- 217/333-2210

Water Survey Telefax Number -- 217/333-6540

TO: Jim Murphy

LOCATION: IEPA

FROM: Susie Dodd

DATE: Sept. 29 1989

TOTAL NUMBER OF PAGES: 8 w/Cover

IF YOU DO NOT RECEIVE ALL THE PAGES INDICATED, PLEASE CALL BACK AS SOON AS POSSIBLE.

abandoned

City Pekin, Ill. County Tazewell Pekin Twp.

Section 2 4e Twp. No. 24 Range 5 east of 3rd P.M.

Location (in feet from section corner) 2800' east of west sec line 3100' north of south sec line

Owner [redacted] Authority H. B. Smith

Contractor H. B. Smith Address San Jose, Ill.

Date drilled 1918 Elev. above sea level top of well 500'

Depth 90'

Log

Were drill cuttings saved Where filed

Size hole 4" If reduced, where and how much

Casing record 4" std black pipe

Distance to water when not pumping Distance to water is

feet after pumping at G. P. M. for hours.

Reference point for ~~[illegible]~~ measurements platform

Type of pump single action hand Distance to cylinder 60'

Length of cylinder 2½"x14" Length of suction pipe below cylinder 18'

Length stroke 6" Speed

Hours used per day Type of power

Rating of motor Rating of pump in G. P. M.

Can following be measured: (1) Static water level 60' est.

(2) Pumping level no (3) Discharge 8 gpm

(4) Influence on other wells none

Temperature of water average Was water sample collected

Date Effect of water on meters, hot water coils, etc. water is medium hard clear and good tasting

Date of Analysis Analysis No.

Recorder W. E. Bradsen

8/8/24

abandoned

City Pekin, Illinois County Tazewell Pekin twp.

Section 8.3h Twp. No. 24 north Range 5 west of 3rd P.M.

Location (in feet from section corner) 200' south of north sec line 1400' west of east sec line

Owner [redacted] Authority F. B. Smith

Contractor F. B. Smith Address San Jose Illinois

Date drilled 1918 Elev. above sea level top of well 475'

Depth 80'

Log Well was driven thru sand and gravel to water bearing sand and gravel

Were drill cuttings saved no Where filed

Size hole 4" If reduced, where and how much

Casing record 4" std. black pipe with strainer

Distance to water when not pumping Distance to water is

feet after pumping at G. P. M. for hours.

Reference point for measurements platform

Type of pump single action hand Distance to cylinder 50'

Length of cylinder 2½"x14" Length of suction pipe below cylinder 18'

Length stroke 6" Speed

Hours used per day Type of power hand

Rating of motor Rating of pump in G. P. M.

Can following be measured: (1) Static water level 50'

(2) Pumping level 50' (3) Discharge 8 gpm

(4) Influence on other wells none

Temperature of water average Was water sample collected

Date Effect of water on meters, hot water coil, etc. Water is medium hard clear and good tasting

Date of Analysis Analysis No.

Recorder

PUMP DATA

Type_____ Make_____

Factory No._____ Serial No._____

For turbine: Length of column below base_____ Size_____

No. of bowls_____ Size O. D._____ Overall length_____

Suction pipe, Size_____ Length_____

R.P.M._____ Rated capacity G.P.M._____

For cylinder: Length of drop pipe below base_____ Size_____

Length of cylinder_____ Size I. D._____ Action S. or D._____

Length of suction pipe_____ Size_____

Length of stroke_____ R.P.M._____ Rating per stroke_____ gal.

For direct suction, centrifugal or rotary:

Center line pump suction from ground_____ below_____ above.

Size of suction_____ Size of discharge_____

No. of stages_____ Speed R.P.M._____

Type of impeller_____ Suction lift_____

Discharge head_____ Rated capacity G.P.M._____

For direct suction, plunger or piston:

Center line pump suction from ground_____ below_____ above.

Type, Single_____ Duplex_____ Triplex_____

Size of plungers_____ Length of stroke_____

Size of suction_____ Size of discharge_____

Suction lift_____ Discharge head_____

Normal speed_____ Rated capacity G.P.M._____

Airlift: Is casing used for eductor pipe_____

Eductor pipe size_____ Length_____

Make of footpiece_____

Air pipe size_____ Length_____

Air pressure, Start_____ Operating_____

Air required, cu. ft. per minute_____

Kind of power:

Hand, Windmill, Electricity, Steam, Gas or Oil.

Electric Motor		Steam, Gas or Oil	
Horsepower_____	Speed_____	Horsepower_____	No. cylinders_____
Current, A. or D._____		Cylinders, I. D._____	Stroke_____
Phase_____	Volts_____	Speed_____	

PUMP DATA

Type_____ Make_____

Factory No._____ Serial No._____

For turbine: Length of column below base_____ Size_____

No. of bowls_____ Size O. D._____ Overall length_____

Suction pipe, Size_____ Length_____

R.P.M._____ Rated capacity G.P.M._____

For cylinder: Length of drop pipe below base_____ Size_____

Length of cylinder_____ Size I. D._____ Action S. or D._____

Length of suction pipe_____ Size_____

Length of stroke_____ R.P.M._____ Rating per stroke_____ gal.

For direct suction, centrifugal or rotary:

Center line pump suction from ground_____ below_____ above.

Size of suction_____ Size of discharge_____

No. of stages_____ Speed R.P.M._____

Type of impeller_____ Suction lift_____

Discharge head_____ Rated capacity G.P.M._____

For direct suction, plunger or piston:

Center line pump suction from ground_____ below_____ above.

Type, Single_____ Duplex_____ Triplex_____

Size of plungers_____ Length of stroke_____

Size of suction_____ Size of discharge_____

Suction lift_____ Discharge head_____

Normal speed_____ Rated capacity G.P.M._____

Airlift: Is casing used for eductor pipe_____

Eductor pipe size_____ Length_____

Make of footpiece_____

Air pipe size_____ Length_____

Air pressure, Start_____ Operating_____

Air required, cu. ft. per minute_____

Kind of power:

Hand, Windmill, Electricity, Steam, Gas or Oil.

Electric Motor

Horsepower_____ Speed_____

Current, A. or D._____

Phase_____ Volts_____

Amps_____

Steam, Gas or Oil

Horsepower_____ No. cylinders_____

Cylinders, I. D._____ Stroke_____

Speed_____

Steam pressure_____

City _____

Section 1.6d Twp. No. a.

Location (in feet from section corner) NW, NE, SW.

Owner [redacted] Authority O. D. Prine

Contractor O. D. Prine Address _____

Date drilled Oct. 1939 Elev. above sea level top of well _____

Depth 38'

Log 5' soil; 31' clay ~~gravel~~ yellow; 2' gravel

Were drill cuttings saved _____ Where filed _____

Size hole _____ If reduced, where and how much _____

Casing record 4" to 38'

Distance to water when not pumping 32' Distance to water is _____

feet after pumping at 5 G. P. M. for ? hours.

Reference point for above measurements _____

Type of pump _____ Distance to cylinder _____

Length of cylinder _____ Length of suction pipe below cylinder _____

Length stroke _____ Speed _____

Hours used per day _____ Type of power _____

Rating of motor _____ Rating of pump in G. P. M. _____

Can following be measured: (1) Static water level _____

(2) Pumping level _____ (3) Discharge _____

(4) Influence on other wells _____

Temperature of water _____ Was water sample collected _____

Date _____ Effect of water on meters, hot water coils, etc. _____

Date of Analysis _____ Analysis No. _____

Recorder _____

Date _____

PUMP DATA

Type _____ Make _____

Factory No. _____ Serial No. _____

For turbine: Length of column below base _____ Size _____

No. of bowls _____ Size O. D. _____ Overall length _____

Suction pipe, Size _____ Length _____

R.P.M. _____ Rated capacity G.P.M. _____

For cylinder: Length of drop pipe below base _____ Size _____

Length of cylinder _____ Size I. D. _____ Action S. or D. _____

Length of suction pipe _____ Size _____

Length of stroke _____ R.P.M. _____ Rating per stroke _____ gal.

For direct suction, centrifugal or rotary:

Center line pump suction from ground _____ below _____ above.

Size of suction _____ Size of discharge _____

No. of stages _____ Speed R.P.M. _____

Type of impeller _____ Suction lift _____

Discharge head _____ Rated capacity G.P.M. _____

For direct suction, plunger or piston:

Center line pump suction from ground _____ below _____ above.

Type, Single _____ Duplex _____ Triplex _____

Size of plungers _____ Length of stroke _____

Size of suction _____ Size of discharge _____

Suction lift _____ Discharge head _____

Normal speed _____ Rated capacity G.P.M. _____

Airlift: Is casing used for eductor pipe _____

Eductor pipe size _____ Length _____

Make of footpiece _____

Air pipe size _____ Length _____

Air pressure, Start _____ Operating _____

Air required, cu. ft. per minute _____

Kind of power:

Hand, Windmill, Electricity, Steam, Gas or Oil.

Electric Motor		Steam, Gas or Oil	
Horsepower _____	Speed _____	Horsepower _____	No. cylinders _____
Current, A. or D. _____		Cylinders, I. D. _____	Stroke _____
Phase _____	Volts _____	Speed _____	
Amps _____		Steam pressure _____	

e Copy —
l. Dept. of Pu Health
aw Copy — W..l Contractor
Copy — Well Owner

FILL IN ALL PERTINENT INFORMATION REQUES AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, ROOM 615, S...E OFFICE BUILDING, SPRINGFIELD, ILLINOIS, 62706. DO NOT DETACH GEOLOGICAL / WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well
   a. Dug ____. Bored ____. Hole Diam. 4 in. Depth 85 ft.
   Curb material ____. Buried Slab: Yes ____ No ____
   b. Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
   c. Drilled ✓. Finished in Drift ✓. In Rock ____.
   Tubular ____. Gravel Packed ____.
   d. Grout:

(Kind)	FROM (Ft.)	TO (Ft.)
Brown Sand	70	85

2. Distance to Nearest:
   Building 150 Ft. Seepage Tile Field None
   Cess Pool none Sewer (non Cast iron) none
   Privy none Sewer (Cast iron) none
   Septic Tank none Barnyard none
   Leaching Pit none Manure Pile none
3. Is water from this well to be used for human consumption?
   Yes ✓ No ____
4. Date well completed June 1970
5. Permanent Pump Installed? Yes ____ No ____
   Manufacturer ____ Type ____
   Capacity ____ gpm. Depth of setting ____ ft.
6. Well Top Sealed? Yes ✓ No ____
7. Pitless Adaptor Installed? Yes ____ No ____
8. Well Disinfected? Yes ____ No ____
9. Water Sample Submitted? Yes ____ No ____

REMARKS: Building not Started

IDPH 4.065
10/68

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner [redacted] Well No. 1
    Address [redacted] Peoria, Ill.
    Driller Acme Well Drilling License No. 92-153
11. Permit No. NE 08454 Date June 1970
12. Water from Brown Sand (Formation) 13. County Tazewell
    at depth 70 to 85 ft.
    Sec. 1 1/4
    Twp. 24N
    Rge. 5W
    Elev. ____
14. Screen: Diam. 4 in.
    Length: 3 ft. Slot 12
15. Casing and Liner Pipe

Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
4	Steel 11 lb	0	82

SHOW LOCATION IN SECTION PLAT

Lot 6 in Sky Air Estate sub. located in the above described section

16. Size Hole below casing: 4 in.
17. Static level 70 ft. below casing top which is 55 ft. above ground level. Pumping level 70 ft. when pumping at 10 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Yellow Sand	70	70
Brown Sand	15	85

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Acme Well Drilling DATE June 1970

SENT BY: Olivetti FX 2000 ; 9-29-89 ; 8:35AM ; 2173338540→ 217 785 3848;# 8

INSTRUCTIONS TO DRILLERS

ublic Health
ell Contractor
ll Owner

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62741. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

LINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

e of Well
Dug ____. Bored ✓. Hole Diam. 42" in. Depth 66' ft.
Curb material ____. Buried Slab: Yes ✓ No ____
Driven ____. Drive Pipe Diam. ____ in. Depth ____ ft.
Drilled ____. Finished in Drift ____. In Rock ____.
Tubular ____. Gravel Packed ✓.
Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

istance to Nearest:
uilding ____ Ft. Seepage Tile Field ____
ess Pool ____ Sewer (non Cast iron) ____
rivy ____ Sewer (Cast iron) ____
eptic Tank ____ Barnyard ____
eaching Pit ____ Manure Pile ____
Well furnishes water for human consumption? Yes ✓ No ____
Date well completed 7-81
Permanent Pump Installed? Yes ____ Date ____ No ____
Manufacturer ____ Type ____ Location ____
Capacity ____ gpm. Depth of Setting ____ Ft.
Well Top Sealed? Yes ✓ No ____ Type ALUMINUM CAP
Pitless Adapter Installed? Yes ✓ No ____
Manufacturer BAKER Model Number 1BAML
How attached to casing? CLAMP
Well Disinfected? Yes ____ No ____
Pump and Equipment Disinfected? Yes ____ No ____
Pressure Tank Size ____ gal. Type ____
Location ____
Water Sample Submitted? Yes ____ No ____
EMARKS:

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10. Property owner [redacted] Well No. ____
Address [redacted] PERKIN
Driller JOSEPH REYNOLD License No. 92-601
11. Permit No. 100409 Date 7-9-81
12. Water from SANDY GRAVEL (Formation) 13. County TAZEWELL
at depth ____ to ____ ft. 12'
Sec. 15
14. Screen: Diam. ____ in.
Length: ____ ft. Slot ____
Twp. 24N
Rge. 5W
Elev. ____

SHOW LOCATION IN SECTION PLAT
36 SE NW

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
6"	PLASTIC	+1	-17
36"	CONCRETE	-17	-66

16. Size Hole below casing: ____ in.
17. Static level ____ ft. below casing top which is ____ ft. above ground level. Pumping level ____ ft. when pumping at ____ gpm for ____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
TOP SOIL	2	
YELLOW CLAY	10	
SANDY GRAVEL	12	
SANDY CLAY	19	
HARD PAN	24	
BLUE CLAY	42	
DRIFT	66	

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Joseph Reynold DATE 7-81

APPENDIX G

Illinois
Environmental
Protection Agency

Division of Public Water Supplies
2200 Churchill Road
Springfield, Illinois 62706

Groundwater Quality Protection Program

Division of Public Water Supplies

Environmental Protection
State of Illinois
Springfield, Illinois

IEPA/PWS/89-070

GROUNDWATER QUALITY PROTECTION PROGRAM:

ILLINOIS AMERICAN WATER COMPANY
PEKIN
FACILITY NUMBER 1795040
WELL SITE SURVEY
REPORT

Prepared by:

Division of Public Water Supplies

Published by:

Illinois Environmental Protection Agency

Springfield, Illinois

March, 1989

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IV. Well Site Survey Methods and Procedures

V. Summary

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A. Topographic Map Displaying Illinois American Water Co.- Pekin Well Locations

B. Aerial Photographic Map

1. Illinois American Water Co. - Pekin Well #1 (50056) Summary Description and Unit Inventory

2. Illinois American Water Co. - Pekin Well #2 (50057) Summary Description and Unit Inventory

3. Illinois American Water Co. - Pekin Well #3 (50058) Summary Description and Unit Inventory

C. Aerial Photographic Map

1. Illinois American Water Co. - Pekin Well #5 (50060) Summary Description and Unit Inventory

2. Illinois American Water Co. - Pekin Well #6 (50061) Summary Description and Unit Inventory

D. Aerial Photographic Map

1. Illinois American Water Co. - Pekin Well #7 (50062) Summary Description and Unit Inventory

E. Aerial Photographic Map

1. Illinois American Water Co. - Pekin Well #8 (50063) Summary Description and Unit Inventory

F. Facility Wells Report

G. Detailed Sampling/Monitoring Results

H. Chemical Information Sheet(s)

I. Glossary - Chemical Information Sheet(s)

INTRODUCTION

This report has been prepared by the Agency pursuant to Section 17.1 of the Illinois Environmental Protection Act. The report summarizes information about your facility and samples collected and analyzed from your well(s). The well site survey provides an inventory of the area around the well(s) to help increase your awareness of potential hazards to groundwater utilized by your facility. This information and technical data will assist you in developing and implementing local groundwater protection measures authorized by the Act.

FACILITY DESCRIPTION AND GEOLOGIC PROFILE OF WELL SITES

Illinois American Water Co. - Pekin utilizes seven high yield wells. The supply furnishes approximately 4,420,000 gallons per day (gpd) to 13,514 services (refer to Table I). All eight wells are dispersed throughout town, but, appear to withdraw water from the Sankoty Aquifer (water bearing formation). The surficial geologic susceptibility rating (permeability rating) is A2. The aquifer is overlain by sand and gravel sediments with moderate to high permeability. Permeability is a measure of the ability of a soil or sediment to transmit fluids. A detailed description and geologic profile is found in the Facility Wells Report (Appendix F). Normal groundwater flow direction is predicted to be from northeast to southwest, assuming that groundwater flow conforms to the general surface character of the area and is not greatly influenced by the large pumping capacities of the PWS wells.

Table I provides a description of each well as follows:

Table I

	Minimum Setback (ft.)	Maximum Setback (ft.)	Status	Capacity (gpm) (MGD)	Specific Capacity (gpm/ft.)	Treatment	Aquifer	Well Depth (ft.)	Well Logs Availabl
Well #1 (50056)	400	No	A	1750/ 1.944	425.3	Chl, Fl	Sand/ Gravel	90	Yes
Well #2 (50057)	400	No	A	1875/ 2.376		Chl, Fl	Sand/ Gravel	91	Yes
Well #3 (50058)	400	No	A	1750/ 2.304	259.4	Chl, FL	Sand/ Gravel	100	Yes
Well #4 (50059)	N.A.	N.A.	I	No Pump	No Pump		Sand/ Gravel	119	Yes
Well #5 (50060)	400	No	A	1700/ 2.52		Chl, Fl	Sand/ Gravel	148	Yes
Well #6 (50061)	400	No	A	1700/ 2.304		Chl, Fl	Sand/ Gravel	139	Yes
Well #7 (50062)	400	No	A	1600/ 2.304		Chl, Fl	Sand/ Gravel	124	Yes
Well #8 (50063)	400	No	A	1750 2.160	37.4	Chl, Fl	Sand/ Gravel	154	Yes

I - Inactive SB - Standby
A - Active

GROUNDWATER SAMPLING AND MONITORING HISTORY

I.A.W.C. - Pekin Wells #1, 3, and 7 were sampled on January 13, 1986. Wells #3, 5 and 6 were sampled on March 27, 1986. All of these wells were sampled as part of a Statewide Groundwater Monitoring Program. The wells were sampled and analyzed for inorganic chemicals and volatile organic/aromatic (VOC/VOA) compounds. Additionally, Well #8 was sampled and analyzed for synthetic organic pesticides (SOC). The wells were all sampled from raw water taps in their respective pump houses.

VOC/VOA analyses performed on Wells #2, 5, 6, 7 and 8 did not detect quantifiable levels of volatile organic/aromatic compounds. Well #1 showed a substantial level of 1,1,1-trichloroethane, which was subsequently confirmed in variable levels by operator samplings (additionally, tetrachloroethylene and trihalomethanes were picked up in the operator samplings). Well #3 showed low levels of tetrachloroethylene and low levels of trihalomethanes, which were subsequently confirmed in variable levels by operator samplings (additionally detected, but never confirmed, in operator samplings were benzene and 1,1,1-trichloroethane). Both wells will continue to be monitoried quarterly by the Agency. (see Appendix H).

The SOC analysis performed on Well #8 did not detect quantifiable levels of synthetic organic pesticides. Inorganic analyses performed on the wells were consistent with other Sankoty aquifer wells. (For detailed analyses results, see Appendix G.)

SURVEY METHODS AND PROCEDURES

The detailed well site survey consists of an aerial photographic map and inventory sheets (Appendix B, C, D, E), that relate information about potential sources, routes, and possible problem sites to your water supply wells. The location of potential sources, routes, possible problem sites, water wells minimum setback zones and the 1,000 foot survey area are all displayed on the aerial photographic map.

The first page of each survey consists of a summary description and geologic profile for each well. The second and following pages of the survey inventory units within and bordering a 1,000 foot radius of the wellhead. A unit is defined as any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). The Agency 5-digit well number is associated with a unit or map code, and then classified. The classification codes relate to definitions of potential contamination sources and routes as defined in the Illinois Groundwater Protection Act (see Groundwater Primer pages 18-19). The distance and direction of the unit from the wellhead is also indicated.

Survey Results and Findings

The I.A.W.C. - Pekin well site field survey was conducted on December 15, 1988 by Dave McMillan from the Agency's Peoria Regional Office. Dave interviewed Richard Tatlock, Illinois American's Water Superintendent for Pekin, Jack Andres and John Tripses, both from the Agency's Peoria Regional Office. The following describes the survey results and findings for Pekin's water supply wells:

[Refer to Aerial Photograph B for the Following Wells:]

I.A.W.C. - Pekin Well #1 (IEPA #50056)

The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments. There is one potential route and one possible problem site within the minimum setback zone. The route is an improperly abandoned well, map code 08, located 50 ft. S. of the wellhead. The possible problem site is a lumber yard, map code 14, located 175 ft. W. of the wellhead.

There are four possible problem sites located within 1,000 ft. of the wellhead. They are, two service stations (map codes 02 and 13) located 1,000 ft. W. and 850 Ft. E., respectively; one gas station (map code 10) located 650 ft. E. N.E.; and a machine and parts company 800 ft. W. of the wellhead (map code 01).

I.A.W.C. - Pekin Well #2 (IEPA #50057)

The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments. There are two potential secondary sources and one possible problem site within the minimum setback zone. Both potential secondary sources are service stations with below ground fuel storage in excess of 500 gallons, map codes 02 and 03. These two units are located 275 ft. W. and 350 ft. W. S.W. of the wellhead, respectively. The possible problem site is a machine and parts company, map code 01, located 75 ft. W. of the wellhead.

Two possible problem sites are located within 1,000 ft. of the wellhead. They are an abandoned well (map code 08) located 725 ft. E. N.E., and a lumber yard (map code 14) located 600 ft. N.E. of the wellhead.

I.A.W.C. - Pekin Well #3 (IEPA #50058)

The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments. There is one potential route and one possible problem site within the minimum setback zone. The route is an improperly abandoned well, map code 08, located 100 ft. S.E. of the wellhead. The possible problem site is a lumber yard, map code 14, located 50 ft. W. of the wellhead.

There are five possible problem sites within 1,000 ft. of the wellhead. They are three service stations (map codes 2, 3 and 13) located 875 ft. W., 1,000 ft. S. S.W., and 1,000 ft. E., respectively; one gas station (map code 10) located 775 ft. E. N.E.; and a machine and parts company 700 ft. W. of the wellhead (map code 01).

[Refer to Aerial Photograph C for the Following Wells:]

I.A.W.C. - Pekin Wells #5 and #6 (IEPA #50060 and 50061, Respectively)

The survey area for both wells is mostly urban. The area consists of high density residences. No possible problem sites were observed at the time of the survey.

[Refer to Aerial Photograph D for the Following Well:]

I.A.W.C. - Pekin Well #7 (50062)

The survey area is mostly urban. The area includes both high density residences and industrial/commercial establishments. There is one possible problem site within the minimum setback zone. This site is a possible furniture stripper, map code 07, located 350 ft. S. S.E. of the wellhead.

There are five possible problem sites within 1,000 ft. of the wellhead. They are, two gas stations (map code 02 and 09) located 925 ft. W. S.W. and 800 ft. S.E., respectively; one autobody shop (map code 01) located 900 ft. W. S.W.; an auto supply dealer (map code 08) 525 ft. S. S.E., and one floor covering store (map code 10) 1,000 ft. S.E. of the wellhead.

[Refer to Aerial Photograph E for the Following Well:]

I.A.W.C. - Pekin Well #8 (50063)

The survey area is mostly urban. The area is mostly commercial establishments. There are two possible problem sites within the minimum setback zone. Both sites are car dealerships, map codes 07 and 23, located 400 ft. N. N.W. and 250 ft. N.E. of the wellhead, respectively.

There are eight possible problem sites within 1,000 ft. of the wellhead. They are, three car dealerships (map codes 03, 05, and 09) located 750 ft. N., 600 ft. N.W., and 450 ft. W. S.W., respectively; one auto mecnanic (map code 06) located 450 ft. N. N.E.; an autobody shop (map code 08) located 450 ft. N.E.; a chemical mixing operation (map code 11) located 500 ft. N.E.; an unknown assembly shop (map code 20) located 925 ft. E. N.E., and a bus rental establishment (map code 22) located 575 E. N.E. of the wellhead.

SUMMARY

The well site survey and monitoring conducted indicate that there are several activities/sites which could pose a hazard to Pekin's seven public water supply wells:

- Two potential secondary sources exist within the minimum setback zones, both are service stations with below ground fuel storage.
- One potential route exists within the minimum setback, an improperly abandoned well.
- Numerous possible problem sites exist within and bordering a 1,000 ft. radius of the wells (for a complete listing see Appendix B thru E).

The Illinois Environmental Protection Act provides minimum protection zones for your wells. These minimum protection zones are regulated by the IEPA. The Act also authorizes county and municipal officials the opportunity to provide maximum protection zones up to 1,000 feet. The responsibility for the controls would then be assumed by local officials through adoption of a maximum setback zone ordinance.

WB/mls/sp0928k/4-7

TECHNICAL APPENDICES

APPENDIX A
Topographic Map Displaying Pekin Well Locations

APPENDIX B
Aerial Photographic Map

APPENDIX: B1 I.A.W.C. Pekin Well #1 (IEPA #50056) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T.Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Peking, IL 61555

AGENCY WELL NO: 50056
WELL NAME & DESC.: Well #1 -- 20 ft. West of Office
TREATMENT APPLICATION POINT: 01
FACILITY NO. & NAME: 1795040 Illinois American Water Company - Pekin Facility
FAC. PHONE NUMBER: (309)346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
24N, 05W, 03, 2H
DISTANCE FROM CORNER: 0200S, 1300 W
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1926
WELL DEPTH: 90 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/8

APPENDIX: B' - I.A.W.C. - Pekin Well #1 (50056) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50056-01-OX
NAME & ADDRESS OF UNIT OWNER: Pekin Machine Auto Parts, 215 Fayette, Pekin, IL 61555 309/345-7011
DESCRIPTION AND COMMENTS: Machine and Parts Co.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 800 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50056-02-OS
NAME & ADDRESS OF UNIT OWNER: Tiny's Triangle Service, 201 Broadway, Pekin 61555 309/346-9067
DESCRIPTION AND COMMENTS: Service station with below ground fuel stoarge (assume greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1000 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50056-03
NAME & ADDRESS OF UNIT OWNER: Jime & Sally's Standard Service (?), 1800 Court St., Pekin, IL 61555 (?) 309/346-6525(?)
DESCRIPTION AND COMMENTS: Service station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1,100 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50056-04
NAME & ADDRESS OF UNIT OWNER: Unknown
DESCRIPTION AND COMMENTS: Grain Elevator
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1,500 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50056-05
NAME & ADDRESS OF UNIT OWNER: National Rental, 706 S. 2nd. St., Pekin, IL 61555, 309/353-8577
DESCRIPTION AND COMMENTS: Equipment Rental Service
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1,700 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50056-06
NAME & ADDRESS OF UNIT OWNER: U.S.C.O. 801 S. 2nd, Pekin, Il 61555 309/353-9407
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gals.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1,900 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50056-07
NAME & ADDRESS OF UNIT OWNER: Erxleben Automotive Garage, 900 S. 2nd St., Pekin, Il 61555, 309/346-2661
DESCRIPTION AND COMMENTS: Service Station
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1900 ft. S.W.

WB/mls/sp0928k/9

APPENDIX: B1 - I.A.W.C. - Pekin Well #1 (50056) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50056-08-RI
NAME & ADDRESS OF UNIT OWNER: I.A.W.C. - Pekin, 328 Broadway St., Pekin, IL 61555
DESCRIPTION AND COMMENTS: Improperly Abandoned Well #4 (IEPA 50059)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 50 ft. S.

WELL NO. - MAP CODE - CLASSF*: 50056-09
NAME & ADDRESS OF UNIT OWNER: Pekin Public Library, 301 S. 4th, Pekin, IL 61555 309/347-7111
DESCRIPTION AND COMMENTS: Library
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 300 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50056-10-OS
NAME & ADDRESS OF UNIT OWNER: Shell Station, 900 N. 5th, Pekin, IL 61555, 309/346-3745(?)
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 650 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50056-11
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS: Bank
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 550 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50056-12
NAME & ADDRESS OF UNIT OWNER: YWCA, 315 Buenna Vista, Pekin, Il 61555 309/347-2104
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 750 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50056-13-OS
NAME & ADDRESS OF UNIT OWNER: Walt's Sunoco Service, 412, Broadway, Pekin, IL 61555 309/346-1309
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage tanks (assumed to be greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 850 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50056-14-XI
NAME & ADDRESS OF UNIT OWNER: Pekin Home Improvement, 300 Broadway St., Pekin, IL 61555 309/347-3383
DESCRIPTION AND COMMENTS: Lumber Yard
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 175 ft. W.

APPENDIX: B2 I.A.W.C. Pekin Well #2 (IEPA #50057) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50057
WELL NAME & DESC.: Well #2 Located at Fayette and Mechanic Sts.
TREATMENT APPLICATION POINT: 02
FACILITY NO. & NAME: 1795040
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
24N, 05W, 03, 2H
DISTANCE FROM CORNER: 0250S, 1900W
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1931
WELL DEPTH: 91 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/11

APPENDIX: B2 - I.A.W.C. - Pekin Well #2 (50057) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50057-01-XI
NAME & ADDRESS OF UNIT OWNER: Pekin Machine Auto Parts, 215 Fayette, Pekin, IL 61555 309/347-7011
DESCRIPTION AND COMMENTS: Machine and Parts Co.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 75 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50057-02-PS
NAME & ADDRESS OF UNIT OWNER: Tiny's Triangle Service, 201 Broadway, Pekin, IL 61555 309/346-9067
DESCRIPTION AND COMMENTS: Service station with below ground fuel storage (assume greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 275 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50057-03-PS
NAME & ADDRESS OF UNIT OWNER: Jim & Sally's Standard Service (?), 1800 Court St., Pekin, IL 61555(?) 309/346-6525(?)
DESCRIPTION AND COMMENTS: Service station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 350 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50057-04
NAME & ADDRESS OF UNIT OWNER: Unknown
DESCRIPTION AND COMMENTS: Grain Elevator
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 850 ft. W. N.W.

WELL NO. - MAP CODE - CLASSF*: 50057-05
NAME & ADDRESS OF UNIT OWNER: U.S.C.O. 801 S. 2nd, Pekin, IL 61555, 309/353-9407
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gals.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1350 ft. S. S.W.

WELL NO. - MAP CODE - CLASSF*: 50057-06
NAME & ADDRESS OF UNIT OWNER: U.S.C.O. 801 S. 2nd, Pekin, IL 61555 309/353-9407
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gals.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1,400 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50057-07
NAME & ADDRESS OF UNIT OWNER: Erxleben Automotive Garage, 900 S. 2nd St., Pekin, IL 61555, 309/346-2661
DESCRIPTION AND COMMENTS: Service Station
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1500 ft. S. S.W.

WELL NO. - MAP CODE - CLASSF*: 50057-08-OR
NAME & ADDRESS OF UNIT OWNER: I.A.W.C., Pekin, 328 Broadway st., Pekin, IL 61555
DESCRIPTION AND COMMENTS: Improperly Abandoned Well #4 (IEPA 50059)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 725 ft. E. N.E.

APPENDIX: B2 - I.A.W.C. - Pekin Well #2 (50057) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50057-09
NAME & ADDRESS OF UNIT OWNER: Pekin Public Library, 301 S. 4th, Pekin, IL 61555 309/347-7111
DESCRIPTION AND COMMENTS: Library
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1000 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50057-10
NAME & ADDRESS OF UNIT OWNER: Shell Station, 900 N. 5th, Pekin, IL 61555 309/346-3745 (?)
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1400 ft. N.E. E.

WELL NO. - MAP CODE - CLASSF*: 50057-11
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS: Bank
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1300 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50057-12
NAME & ADDRESS OF UNIT OWNER: YWCA 315 Buenna Vista, Pekin, IL 61555 309/347-2104
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1500 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50057-13
NAME & ADDRESS OF UNIT OWNER: Walt's Sunoco Service, 412 Broadway, Pekin, IL 61555 309/346-1309
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage tanks (assumed to be greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1575 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50057-14 OX
NAME & ADDRESS OF UNIT OWNER: Pekin Home Improvement, 300 Broadway St., Pekin, IL 61555 309/347-3383
DESCRIPTION AND COMMENTS: Lumber Yard
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 600 ft. N.E.

WB/mls/sp0928k/13

APPENDIX: B3 I.A.W.C. Pekin Well #3 (IEPA #50058) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50058
WELL NAME & DESC.: Well #3 -- 50 ft. E. of the office
TREATMENT APPLICATION POINT: 03
FACILITY NO. & NAME: 1795040 Illinois American Water Co. - Pekin Facility
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
24N, 05W, 03, 2H
DISTANCE FROM CORNER: 0200S, 1180W
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1937
WELL DEPTH: 100 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area is a mixture of high density residences and commercial establishments.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB/mls/sp0928k/14

APPENDIX: B3 - I.A.W.C. - Pekin Well #3 (50058) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50058-01-OX
NAME & ADDRESS OF UNIT OWNER: Pekin Machine Auto Parts - 215 Fayette, Pekin, IL 61555 309/347-7011
DESCRIPTION AND COMMENTS: Machine and Parts Co.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 700 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50058-02-OS
NAME & ADDRESS OF UNIT OWNER: Tiny's Triangle Service, 201 Broadway, Pekin, IL 61555 309/346-9067
DESCRIPTION AND COMMENTS: Service station with below ground fuel storage (assume greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 875 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50058-03-OS
NAME & ADDRESS OF UNIT OWNER: Jim & Sally's Standard Service, 1800 Court St., Pekin, IL 61555 309/346-6525(?)
DESCRIPTION AND COMMENTS: Service station with below ground fuel storage (assumed greater than - 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1000 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50058-04
NAME & ADDRESS OF UNIT OWNER: Unknown
DESCRIPTION AND COMMENTS: Grain Elevator
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1400 ft. W.

WELL NO. - MAP CODE - CLASSF*: 50058-05
NAME & ADDRESS OF UNIT OWNER: National Rental, 706 S. 2nd St., Pekin, IL 61555 309/353-8577
DESCRIPTION AND COMMENTS: Equipment Rental Service
PRE OR POST (Y,N) Y
DISTANCE AND DIRECTION: 1525 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50058-06
NAME & ADDRESS OF UNIT OWNER: U.S.C.O. 801 S. 2nd, Pekin, IL 61555 309/353-9407
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gals.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1800 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50058-07
NAME & ADDRESS OF UNIT OWNER: Erxleben Automotive Garage, 900 S. 2nd St., Pekin, Il 61555 309/346-2661
DESCRIPTION AND COMMENTS: Service Station
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1850 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50058-08-RI
NAME & ADDRESS OF UNIT OWNER: I/A/W/C/ - Pekin, 328 Broadway St., Pekin, IL 61555
DESCRIPTION AND COMMENTS: Improperly Abandoned Well #4 (IEPA 50059)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 100 ft. S.E.

APPENDIX: B3 - I.A.W.C. - Pekin Well #3 (50058) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50058-09
NAME & ADDRESS OF UNIT OWNER: Pekin Public Library, 301 S. 4th, Pekin, IL 61555 309/347-7111
DESCRIPTION AND COMMENTS: Library
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 375 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50058-10-OS
NAME & ADDRESS OF UNIT OWNER: Shell Station, 900 N. 5th, Pekin, IL 61555 309/346-3745 (?)
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 775 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50058-11
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS: Bank
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 700 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50058-12
NAME & ADDRESS OF UNIT OWNER: YWCA 315 Buenna Vista, Pekin, IL 61555 309/347-2104
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 850 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50058-13-OS
NAME & ADDRESS OF UNIT OWNER: Walt's Sunoco Service, 412 Broadway, Pekin, IL 61555 309/346-1309
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage tanks (assumed to be greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1000 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50058-14-XI
NAME & ADDRESS OF UNIT OWNER: Pekin Home Improvement - 300 Broadway St., Pekin, IL 61555 309/348-3383
DESCRIPTION AND COMMENTS: Lumber Yard
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 50 ft. W.

WB/mls/sp0928k/16

APPENDIX C
Aerial Photographic Map

APPENDIX: C1 I.A.W.C. Pekin Well #5 (IEPA #50060)WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50060
WELL NAME & DESC.: Well #5 -- Located at 1200 Willow St.
TREATMENT APPLICATION POINT: 05
FACILITY NO. & NAME: 1795040 -- Illinois American Water Co. - Pekin Facility
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
25N, 05W, 35, 4D
DISTANCE FROM CORNER: 2580N, 2290W
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1957
WELL DEPTH: 148 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area is predominantly high density residences.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/17

APPENDIX: C1 -- I.A.W.C. - Pekin Well #5 (50060) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: NONE OBSERVED
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

WB/mls/sp0928k/18

APPENDIX: C2 I.A.W.C. Pekin Well #6 (IEPA #50061) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50061
WELL NAME & DESC.: Well #6 -- Located at 1200 Willow St.
TREATMENT APPLICATION POINT: 06
FACILITY NO. & NAME: 1795040 -- Illinois American Water Co. - Pekin Facility
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
25N, 05W, 35, 4D
DISTANCE FROM CORNER: 2400N, 2000W
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1963
WELL DEPTH: 139 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area is predominantly high density residences.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/19

APPENDIX: C2 -- I.A.W.C. - Pekin Well #6 (50061) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: NONE OBSERVED
NAME & ADDRESS OF UNIT OWNER:
DESCRIPTION AND COMMENTS:
PRE OR POST (Y,N):
DISTANCE AND DIRECTION:

WB/mls/sp0928k/20

APPENDIX D
Aerial Photographic Map

INITIAL
2/6/89

APPENDIX: D1 I.A.W.C. Pekin Well #7 (IEPA #50062) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Colemen, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50062
WELL NAME & DESC.: Well #7 -- At Edds Avenue
TREATMENT APPLICATION POINT: 07
FACILITY NO. & NAME: 1795040 -- Illinois American Water co. - Pekin Facility
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
24N, 05W, 03, 5C
DISTANCE FROM CORNER: 1700N, 2490E
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1969
WELL DEPTH: 124 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The area includes both high density residences and industrial/commercial establishments.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/21

APPENDIX: D1 - I.A.W.C. - Pekin Well #7 (50062) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50062-01-OX
NAME & ADDRESS OF UNIT OWNER: Unknown
DESCRIPTION AND COMMENTS: Autobody
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 900 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50062-02-OS
NAME & ADDRESS OF UNIT OWNER: Freedom Gas Station, 1206 S. 2nd St., Pekin, IL 61555 309/353-4938
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed to be greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 925 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50062-03
NAME & ADDRESS OF UNIT OWNER: Pekin Energy, 1300 S. 2nd St., Pekin, IL 61555 309/347-9200
DESCRIPTION AND COMMENTS: Alcohol Munufacturer
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1550 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50062-04
NAME & ADDRESS OF UNIT OWNER: Pekin Rental Center, Derby St., Pekin, IL 61555(?)
DESCRIPTION AND COMMENTS: Equipment Rental Establishment
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1025 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50062-05
NAME & ADDRESS OF UNIT OWNER: Dean's F.S. Service, 714 S. 3rd St., Pekin, IL 61555 309/346-9370
DESCRIPTION AND COMMENTS: Bulk Fuel Storage (assume greater than 25,000 gal.) above ground, may also store chemicals. (?)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1800 ft. N. N.E.

WELL NO. - MAP CODE - CLASSF*: 50062-06
NAME & ADDRESS OF UNIT OWNER: Valley Chemical Solvents, 904 S. 2nd St., Peoria, IL 61555 309/346-2633
DESCRIPTION AND COMMENTS: LPC #1798010008, USEPA #025733866 Warehouse chemicals, licensed Waste Hauler, etc.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1700 ft. N. N.E.

WELL NO. - MAP CODE - CLASSF*: 50062-07-XI
NAME & ADDRESS OF UNIT OWNER: Ron's Used Furniture and Appliances, 259 Derby Pekin, IL 61555 309/347-8256
DESCRIPTION AND COMMENTS: May strip or refinish furniture.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 350 ft. S. S.E.

WELL NO. - MAP CODE - CLASSF*: 50062-08-OX
NAME & ADDRESS OF UNIT OWNER: South Side Auto Supply, 270 Derby, Pekin, IL 61555 309/346-3119
DESCRIPTION AND COMMENTS: Unknown
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 525 ft. S. S.E.

APPENDIX: D1 - I.A.W.C. - Pekin Well #7 (50062) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

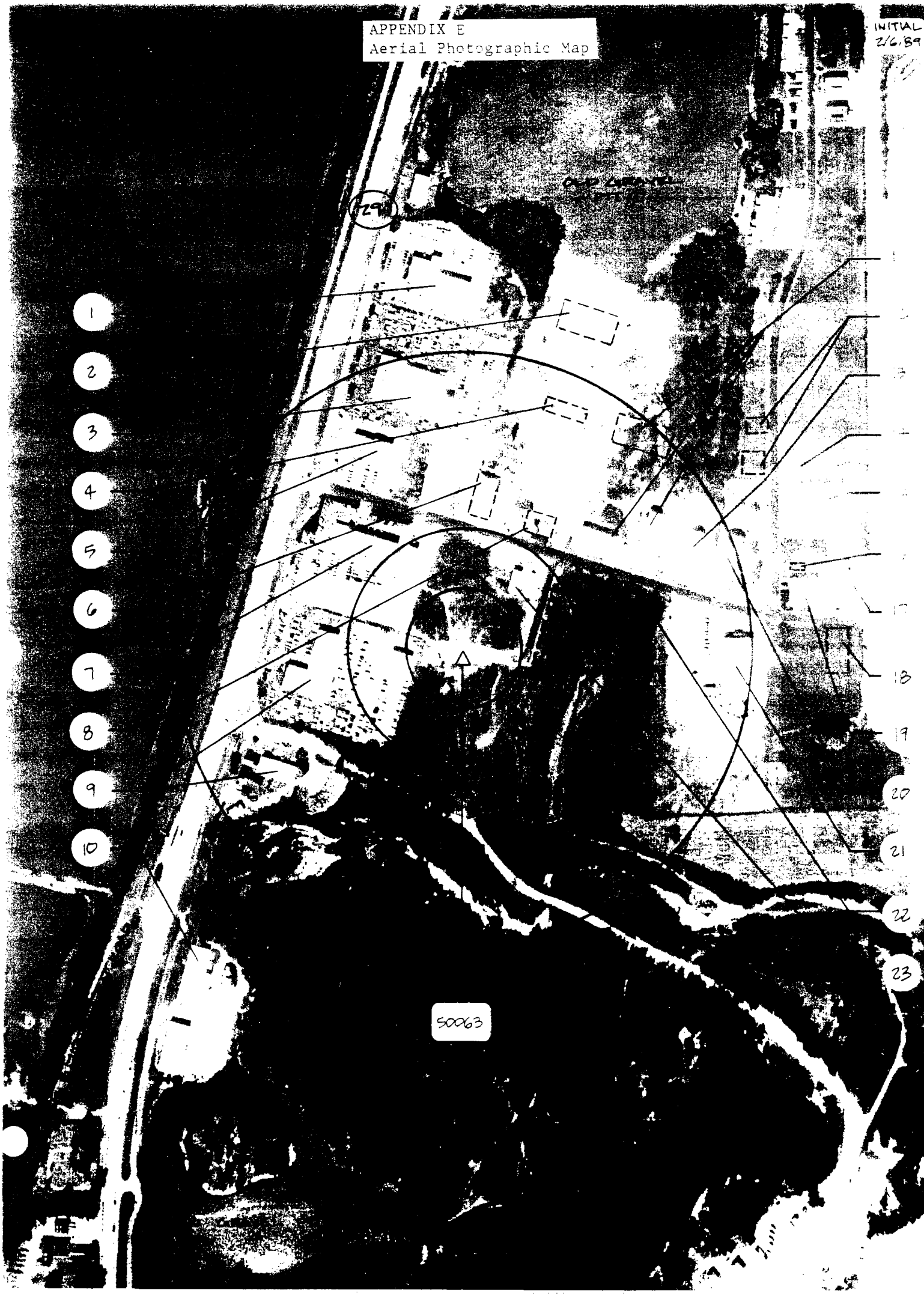
WELL NO. - MAP CODE - CLASSF*: 50062-09-OS
NAME & ADDRESS OF UNIT OWNER: Phillips 66 (?) Derby St., Pekin, IL 61555 (?)
DESCRIPTION AND COMMENTS: Gas station with below ground fuel storage (assumed greater than 500 gal.)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 800 ft. S.E.

WELL NO. - MAP CODE - CLASSF*: 50062-10-OX
NAME & ADDRESS OF UNIT OWNER: Vonderheide Floor Covering Co., 290 Derby, Pekin, IL 61555 309/346-3688
DESCRIPTION AND COMMENTS: Floor Coverings
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1000 ft. S.E.

WB/mls/sp0928k/23

APPENDIX E
Aerial Photographic Map

INITIAL
2/6/89



APPENDIX: E1 I.A.W.C. Pekin Well #8 (IEPA #50063) WELL SITE SURVEY SUMMARY DESCRIPTION AND GEOLOGIC PROFILE

SURVEYOR: McMillan
SURVEY DATE: 12/15/88

ADDRESS:
T. Wilkes Coleman, Vice President, 328 Broadway St., P.O. Box 1209, Pekin, IL 61555

AGENCY WELL NO: 50063
WELL NAME & DESC.: Well #8 -- located at 2222 Lakecrest Dr.
TREATMENT APPLICATION POINT: 08
FACILITY NO. & NAME: 1795040 -- Illinois American Water Co. - Pekin Facility
FAC. PHONE NUMBER: 309/346-2171
LOCATION:
TWP, RNG, SECTION, 10 ACRE PLOT:
25N, 05W, 23, 5A
DISTANCE FROM CORNER: 0217N, 2533E
QUAD SHEET CODE & NAME: 108C, Pekin
MIN. SETBACK: 400 ft.
MAX. SETBACK:
SURFICIAL GEOLOGIC SUSCEPTIBILITY RATING: A2, Shallow, Thick, Permeable Sand and Gravel
AGE OF WELL (DATE WELL CONSTRUCTION): 1979
WELL DEPTH: 154 ft.
AQUIFER CODE: 0101, Shallow Sand and Gravel Aquifer
MULTIPLE AQUIFER (Y, N): No
SUMMARY DESCRIPTION OF 1,000' RADIUS AREA: The survey area is mostly urban. The survey area is mostly commercial establishments.
INTERVIEW(S) NAME-ADDRESS-AFFILIATION-TELEPHONE NO.:
Richard T. Tatlock, 328 Broadway St., Pekin, IL 61554, Water Superintendent 309/346-2171
Jack Andres, 5415 N. University, Peoria, IL 61614, IEPA, Div. of Air Pollution Control, Peoria Field Staff 309/693-5463
John Tripses, 5415 N. University, Peoria, IL 61614, IEPA, Manager, Div. of Land Pollution Control, Peoria Field Staff 309/693-5463.

WB:mls/sp0928k/24

APPENDIX: E1 - I.A.W.C. - Pekin Well #8 (50063) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50063-01
NAME & ADDRESS OF UNIT OWNER: Midwest Imports, 2350 N. 8th, Pekin, IL 61555 309/347-3191
DESCRIPTION AND COMMENTS: Car Dealership& Service, may have below ground fuel storage
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1150 ft. N

WELL NO. - MAP CODE - CLASSF*: 50063-02
NAME & ADDRESS OF UNIT OWNER: Maintenance Shed, Owner Unknown
DESCRIPTION AND COMMENTS: Maintenance shed, concrete culverts
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1150 ft. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-03-OX
NAME & ADDRESS OF UNIT OWNER: Ray Dennison Chevrolet, 2320 N. 8th, Pekin, IL 61555 309/347-3101
DESCRIPTION AND COMMENTS: Car Dealership/Service, may have below ground fuel storage
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 750 ft. N

WELL NO. - MAP CODE - CLASSF*: 50063-04-OX
NAME & ADDRESS OF UNIT OWNER: Unknown Owner
DESCRIPTION AND COMMENTS: Unknown Building
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 850 ft. N. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-05-OX
NAME & ADDRESS OF UNIT OWNER: Velde Lincoln Mercury Merkur, 2300 N. 8th St., Pekin, IL 61555 309/353-6290
DESCRIPTION AND COMMENTS: Car Dealership/Service, may have below ground fuel storage
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 600 ft. N.W.

WELL NO. - MAP CODE - CLASSF*: 50063-06-OX
NAME & ADDRESS OF UNIT OWNER: Hitchcock Mechanical, 821 Brenkman Dr., Pekin, IL 61555 309/364-8375
DESCRIPTION AND COMMENTS: Auto Mechanic
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 450 ft. N. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-07-XI
NAME & ADDRESS OF UNIT OWNER: Velde Oldsmobile Cadillac, Inc., 2220 N. 8th., Pekin, IL 61555 309/346-1181
DESCRIPTION AND COMMENTS: Car Dealership/Service, may have below ground fuel storage
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 400 ft. N. N.W.

WELL NO. - MAP CODE - CLASSF*: 50063-08-OX
NAME & ADDRESS OF UNIT OWNER: Tazewell Towing, 825 Brenkman Dr., Pekin, IL 61555 309/347-1711
DESCRIPTION AND COMMENTS: Body Shop & Used Cars
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 450 ft. N.E.

APPENDIX: E1 - I.A.W.C. - Pekin Well #8 (50063) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50063-09-OX
NAME & ADDRESS OF UNIT OWNER: Velde Ford, 2200 N. 8th, Pekin, IL 61555 309/347-3111
DESCRIPTION AND COMMENTS: Car Dealership/Service, may have below ground fuel storage
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 450 ft. W. S.W.

WELL NO. - MAP CODE - CLASSF*: 50063-10
NAME & ADDRESS OF UNIT OWNER: Illini Welding Supply, 2100 N. 8th, Pekin, IL 61555 309/346-3164
DESCRIPTION AND COMMENTS: Welding Supplies
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1350 ft. S.W.

WELL NO. - MAP CODE - CLASSF*: 50063-11-OX
NAME & ADDRESS OF UNIT OWNER: Trace Chemicals, 839 Brenkman Dr., Pekin, IL 61555 309/347-2184
DESCRIPTION AND COMMENTS: Mix the chemicals used to treat seed corn -- do not apply to corn at these locations. Recent fire investigated by OLPC and DAPC.
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 500 ft. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-12
NAME & ADDRESS OF UNIT OWNER: J.M. Industrial Supplies, 2323 Lakeshore Dr., Pekin, IL 61555 309/346-5796
DESCRIPTION AND COMMENTS: Industrial Supplies (?)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1150 ft. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-13
NAME & ADDRESS OF UNIT OWNER: Illinois Valley Library System, 845 Brenkman Dr., Pekin, IL 61555 309/353-4110
DESCRIPTION AND COMMENTS: Warehouse (?)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 800 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-14
NAME & ADDRESS OF UNIT OWNER: Superior Ambulance Service, 2314 Lakeshore Dr., Pekin, IL 61555 309/347-6611
DESCRIPTION AND COMMENTS: Ambulance Service
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1300 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-15
NAME & ADDRESS OF UNIT OWNER: Hamptons Maytag, Cabinets, etc., 2312 Lakeshore Dr., Pekin, IL 61555 309/347-7768
DESCRIPTION AND COMMENTS: Appliances
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1250 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-16
NAME & ADDRESS OF UNIT OWNER: Unknown
DESCRIPTION AND COMMENTS: Propane Tank
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1150 E. N.E.

APPENDIX: 51 - I.A.W.C. - Pekin Well #8 (50063) INVENTORY AND SYNOPSIS OF UNITS

*CLASSF KEY

MIN. ZONE	OUTSIDE MIN. ZONE
PP = POTENTIAL PRIMARY	OP = POTENTIAL PRIMARY
PS = POTENTIAL SECONDAY	OS = POTENTIAL SECONDARY
RI = POTENTIAL ROUTE	OR = POTENTIAL ROUTE
CC = CERTIFIED	CC = CERTIFIED
XI = UNKNOWN	OX = UNKNOWN
CU = CLEANUP	CU = CLEANUP

WELL NO. - MAP CODE - CLASSF*: 50063-17
NAME & ADDRESS OF UNIT OWNER: Abandoned, previous owner believed to be Florentine Kitchn & Bath
DESCRIPTION AND COMMENTS: Drums observed on East Side of Building Marked Hazardous (Note: Has been referred to D.L.P.C., Peoria)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1375 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-18
NAME & ADDRESS OF UNIT OWNER: Frontier Enterprise Inc. (?) Brenkman Dr., Pekin, IL (?)
DESCRIPTION AND COMMENTS: Unknown
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1250 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50063-19
NAME & ADDRESS OF UNIT OWNER: Schwans North-Central Illinois Co., 901 Brenkman Dr., Pekin, IL 61555 309/347-5770
DESCRIPTION AND COMMENTS: Food Warehouse
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 1150 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-20-OX
NAME & ADDRESS OF UNIT OWNER: M&W Assembles, 851 Brenkman Dr., Pekin, IL 61555 309/347-7677
DESCRIPTION AND COMMENTS: Unknown
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 925 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-21
NAME & ADDRESS OF UNIT OWNER: Central Illinois District Council of Carpenters, 910 Brenkman Dr., Pekin, IL 61555 309/353-4232
DESCRIPTION AND COMMENTS: Union Hall
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 900 ft. E.

WELL NO. - MAP CODE - CLASSF*: 50063-22-OX
NAME & ADDRESS OF UNIT OWNER: Illinois Motor Coach, 840 Brenkman, Pekin, IL 61555 309/346-6452
DESCRIPTION AND COMMENTS: School Bus Rental, may have fuel storage. (?)
PRE OR POST (Y,N): Y
DISTANCE AND DIRECTION: 575 ft. E. N.E.

WELL NO. - MAP CODE - CLASSF*: 50063-23-XI
NAME & ADDRESS OF UNIT OWNER: Dodge Dealership, Unknown owner.
DESCRIPTION AND COMMENTS: Currently empty - will be a car dealership/service, may have below ground fuel storage.
PRE OR POST (Y,N): Y or N (?)
DISTANCE AND DIRECTION: 250 ft. N.E.

APPENDIX F

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN

OWNER	OFFICIAL CUSTODIAN
T.WILKES COLEMAN	ARTHUR E. SNELSON JR.
VICE PRESIDENT	123 S.W. WASHINGTON ST.
123 S.W. WASHINGTON ST.	PEORIA IL 61602
PEORIA IL 61602	

WELL: 50056 WELL 1 20 FT W OF OFFICE STATUS: ACTIVE BACKUP DEPTH(FT): 90
LATITUDE: N40 34 01.0 LONGITUDE: W089 39 03.0 TWP: 24N RNG: 05W SEC: 03 PLOT: 2H

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50057 WELL 2 FAYETTE & MECHANIC STS STATUS: ACTIVE BACKUP DEPTH(FT): 91
LATITUDE: N40 34 03.0 LONGITUDE: W089 39 05.0 TWP: 24N RNG: 05W SEC: 03 PLOT: 3H

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50058 WELL 3 50 FT E OF OFFICE STATUS: ACTIVE BACKUP DEPTH(FT): 100
LATITUDE: N40 34 00.0 LONGITUDE: W089 39 02.0 TWP: 24N RNG: 05W SEC: 03 PLOT: 2H

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50059 WELL 4 312 FAYETTE STATUS: INACTIVE* BACKUP DEPTH(FT): 119
LATITUDE: N40 34 02.0 LONGITUDE: W089 39 04.0 TWP: 24N RNG: 05W SEC: 03 PLOT: 2H

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 400* ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50060 WELL 5 AT 1200 WILLOW ST STATUS: ACTIVE DEPTH(FT): 148
LATITUDE: N40 34 30.0 LONGITUDE: W089 38 07.0 TWP: 25N RNG: 05W SEC: 35 PLOT: 4D

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50061 WELL 6 AT 1200 WILLOW ST STATUS: ACTIVE DEPTH(FT): 139
LATITUDE: N40 34 29.0 LONGITUDE: W089 38 05.0 TWP: 25N RNG: 05W SEC: 35 PLOT: 4D

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN (CONTINUED)

WELL: 50062 WELL 7 AT 125 EDDS AVE STATUS: ACTIVE DEPTH(FT): 124
LATITUDE: N40 33 28.0 LONGITUDE: W089 39 20.0 TWP: 24N RNG: 05W SEC: 03 PLOT: 5C

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

WELL: 50063 WELL 8 AT 2222 LAKECREST DR STATUS: ACTIVE DEPTH(FT): 154
LATITUDE: N40 35 51.0 LONGITUDE: W089 38 13.0 TWP: 25N RNG: 05W SEC: 23 PLOT: 5A

SUSCEPTIBILITY - LAND BURIAL: A2 SUSCEPTIBILITY - LAND SPREADING: --- MINIMUM SETBACK(FT): 0400 ---
AQUIFERS: QUATERNARY SYSTEM

SUSCEPTIBILITY CODES
LAND BURIAL: A2 = THICK, PERMEABLE SAND AND GRAVEL WITHIN 20 FT OF LAND SURFACE.

*NOTE: INACTIVE WELLS SHOULD EITHER BE RETROFITTED FOR USE OR PROPERLY ABANDONED. INACTIVE WELLS WHICH ARE IMPROPERLY ABANDONED ARE CONSIDERED POTENTIAL ROUTES ACCORDING T[illegible].A. 85-0863.

APPENDIX G

IEPA WELL HEAD SURVEY

*** CONTINUED ***

[illegible]

FACILITY: I795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 01 INTO WELL 1 STATUS: A
RAW SRCE: 50056 WELL 1 20 FT W OF OFFICE STATUS: A

SAMPLE NO: Z001681 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		5.100	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		122.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		42.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		39.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		6.500			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		80.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		131.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.150	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		19.000			
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		77.000	1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		257.000			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ABCR ANAL BY ICB		5.000 <	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000 <	5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000 <	1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000 <	150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		143.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PERIN *** CONTINUED ***

0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000 <	
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	150.000	5000.000
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000 <	
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000	10.000
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L	5.000 <	
0000001	032	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	793.000	
0000001	033	71900	MERCURY,TOTAL UG/L AS HG	0.010 <	2.000
0000001	034	00010	WATER TEMPERATURE DEG C	14.000	
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN	1750.000	
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	268.000	
0000001	037	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	1010.000	
0000001	038	00400	PH PH UNITS	7.200	
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3	310.000	
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	70.000	
0000001	041	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	31.000	
0000001	042	90410		316.000	

SAMPLE NO: R006980 LOCATION: WELL #1 COLL DATE: 08/07/80 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 09/25/80 RECEIVED BY:
SMPL PURP: I-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 08/80 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK MIN	STANDARDS RANYWTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1030.000			
		00403	PH LABORATORY UNITS		7.000			
		00410	ALKALINITY,TOTAL MG/L AS CACO3		297.000			
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		6.000		10.000	
		00720	CYANIDE,TOTAL MG/L AS CN		0.005 <		0.200	
		00900	HARDNESS,EDTA MG/L AS CACO3		448.000			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		120.000			
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		45.000			
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		35.000			
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.800			
		00940	CHLORIDE,TOTAL MG/L AS CL		73.000			
		00945	SULFATE,TOTAL MG/L AS SO4		131.000			
		00951	FLUORIDE,TOTAL MG/L AS F		0.150		4.000	
		00956	SILICA,TOTAL MG/L AS SIO2		20.000			
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		0.500 <		50.000	
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		80.000		1000.000	
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		1.000 <			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		200.000			
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		5.000 <		10.000	
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L AS CR ANAL BY ICB		10.000 <		50.000	
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		10.000 <			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		10.000 <		5000.000	
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FE ANAL BY ICP		20.000		1000.000	
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		50.000 <		50.000	

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PERIN ***CONTINUED***

01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	10.000	150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	10.000 <	[illegible]
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	10.000 <	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	120.000	
01087	VANADIUM,TOTAL RECOVERABLE UG/L AS V ANAL BY ICP	10.000 <	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	10.000 <	5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L AS SE	1.000	10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	739.000	
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	620.000	
71900	MERCURY,TOTAL UG/L AS HG	0.050 <	2.000

SAMPLE NO: D86881600 LOCATION: PEKIN/WELL 7 COLL DATE: 11/07/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: R TATLOCK LAB RCVD: 11/09/88 RECEIVED BY: TJW
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 11/21/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 11/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	6.000			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <		7.000	
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <		5.000	
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <		200.000	
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <		5.000	
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <		5.000	
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	3.000			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <		5.000	
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D86633600 LOCATION: PEKIN/#1 WELL COLL DATE: 07/18/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 07/19/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 07/28/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 07/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	3.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	7.000	
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <	
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000	
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <	
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <	
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <	
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <	
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <	

SAMPLE NO: D86471600 LOCATION: PEKIN/WELL 1 COLL DATE: 05/05/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 05/06/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOC'S LAB COMPL: 05/26/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 05/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	2.000	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D86214900 LOCATION: IL AMERICAN WTR CMPNY-PEKIN/WELL 3 COLL DATE: 01/25/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 01/26/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOC'S LAB COMPL: 02/16/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 01/88 FUND CODE: PW30

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	4.000			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	5.000			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D76050100 LOCATION: IL AMERICAN WTR CMPNY-PEKIN/WELL 1 COLL DATE: 11/02/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 11/03/87 RECEIVED BY: D V
SMPL PURP: 4-VARIANCE COMMENTS: VOC'S LAB COMPL: 02/11/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 11/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	2.000			
431A 00	004	32104	BROMOFORM UG/L GC/MS	UG/L	13.000			
431A 00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431A 00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431A 00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <			
431A 00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431A 00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431A 00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431A 00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	4.000			
431A 00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431A 00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431A 00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431A 00	019	81551	XYLENE UG/L	UG/L	1.000 <			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

SAMPLE NO: D75857300 LOCATION: PEKIN WELL 1 COLL DATE: 08/24/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 08/25/87 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 09/09/87 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 08/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431A 00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431A 00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <			
431A 00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431A 00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431A 00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431A 00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A 00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431A 00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431A 00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431A 00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431A 00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D758030 LOCATION: PEKIN IAWC WELL 1 COLL DATE: 07/23/87 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: WM MCMILLAN LAB RCVD: 07/30/87 RECEIVED BY:
SMPL PURP: 2-CHECK COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 07/87 FUND CODE: 30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00010	WATER TEMPERATURE DEG C		14.200			
		00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		254.000			
		00094	CONDUCTIVITY - FIELD (UMHOS/CM @ 25 C)		1010.000			
		00400	PH PH UNITS		7.190			
		32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
		32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
		32104	BROMOFORM UG/L GC/MS		1.000 <			
		32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
		32106	CHLOROFORM UG/L GC/MS		1.000 <			
		34301	CHLOROBENZENE UG/L		1.000 <			
		34423	METHYLENE CHLORIDE UG/L		1.000 <			
		34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
		34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
		34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	1.000 <	200.000
34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	1.000 <	
34716	DICHLOROBENZENE UG/L	1.000 <	
39180	TRICHLOROETHYLENE UG/L	1.000 <	5.000
72037	PUMPING RATE GPM	1750.000	
77279	1,2-DICHLOROETHANE UG/L	1.000 <	
78113	ETHYLBENZENE UG/L	1.000 <	
78124	BENZENE UG/L	1.000 <	5.000
78131	TOLUENE UG/L	1.000 <	
81551	XYLENE UG/L	1.000 <	

SAMPLE NO: Z001680 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L CG/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L CG/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L CG/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		24.000	200.000		
0000001	015	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	016	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	017	00010	WATER TEMPERATURE DEG C		14.000			
0000001	018	00059	FLOW (PUMPING) RATE GAL/MIN		1750.000			
0000001	019	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		268.000			
0000001	020	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1010.000			
0000001	021	00400	PH PH UNITS		7.200			
0000001	022	00410	ALKALINITY,TOTAL MG/L AS CACO3		310.000			
0000001	023	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		70.000			
0000001	024	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		31.000			
0000001	025	90410			316.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 02 INTO WELL 2 STATUS: A
RAW SRCE: 50057 WELL 2 FAYETTE & MECHANIC STS STATUS: A

SAMPLE NO: Z001685 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		5.800	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		120.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		45.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		34.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		4.100			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		64.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		120.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.140	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		20.000			
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		84.000	1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		1.000 <			
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		191.000			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000 <	5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000 <	1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000 <	150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		116.000			
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000 <			
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000 <	5000.000		
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000 <			
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		1.000	10.000		
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L		5.000 <			
0000001	032	70300	RESIDUE,TOTAL FILTERABLE 0180 C,MG/L		686.000			
0000001	033	71900	MERCURY,TOTAL UG/L AS HG		0.010 <	2.000		
0000001	034	00010	WATER TEMPERATURE DEG C		14.500			
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN		1875.000			
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		143.000			
0000001	037	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		935.000			
0000001	038	00400	PH PH UNITS		7.000			
0000001	039	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		30.000			
0000001	040	90410			310.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

SAMPLE NO: B039449 LOCATION: WELL #2 COLL DATE: 05/23/83 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 07/18/83 RECEIVED BY:
SMPL PURP: I-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWH INORG OBSRVATNS: SMPL PERIOD: 05/83 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		910.000			
		00403	PH LABORATORY UNITS		7.600			
		00410	ALKALINITY,TOTAL MG/L AS CACO3		320.000			
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		12.000	10.000*		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005 <	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		474.000			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		116.000			
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		47.000			
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		22.000			
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.700			
		00940	CHLORIDE,TOTAL MG/L AS CL		43.000			
		00945	SULFATE,TOTAL MG/L AS SO4		122.000			
		00951	FLUORIDE,TOTAL MG/L AS F		0.110	4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		19.000			
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		81.000	1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		180.000			
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		3.000 <	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		180.000	1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		6.000	150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		3.000 <			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		5.000 <	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		141.000			
		01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		4.000 <			
		01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		206.000	5000.000		
		01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		2.000	10.000		
		70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		555.000			
		70304	TOTAL DISSOLVED SOLIDS MG/L BY EC		550.000			
		71900	MERCURY,TOTAL UG/L AS HG		0.050 <	2.000		

SAMPLE NO: Z001684 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	018	00010	WATER TEMPERATURE DEG C		14.500			
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN		1875.000			
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		143.000			
0000001	021	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		935.000			
0000001	022	00400	PH PH UNITS		7.000			
0000001	023	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		30.000			
0000001	024	90410			310.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 03 INTO WELL 3 STATUS: A
RAW SRCE: 50058 WELL 3 50 FT E OF OFFICE STATUS: A

SAMPLE NO: Z001683 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00700700 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00700700 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		5.800	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		116.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		48.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		44.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		3.600			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		91.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		127.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	011	00951	FLUORIDE,TOTAL MG/L AS F	0.920		4.000
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2	20.000		
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	1.000	<	50.000
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	87.000		1000.000
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	0.500	<	
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	240.000		
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	3.000	<	10.000
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	5.000	<	50.000
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000	<	
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	5.000	<	5000.000
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	50.000	<	1000.000
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	8.000		150.000
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	5.000	<	
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	3.000	<	50.000
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	134.000		
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000	<	
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	50.000	<	5000.000
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	<	
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L	5.000	<	
0000001	032	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	834.000		
0000001	033	71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000
0000001	034	00010	WATER TEMPERATURE DEG C	15.000		
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN	1750.000		
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	596.000		
0000001	037	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	1015.000		
0000001	038	00400	PH PH UNITS	7.200		
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3	366.000		
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	300.000		
0000001	041	90410		319.000		

SAMPLE NO: B018275 LOCATION: WELL #3 COLL DATE: 12/14/82 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 01/24/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 12/82 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1170.000				
		00403	PH LABORATORY UNITS		7.500				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		327.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		5.900		10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		504.000				
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		124.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		47.500				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		55.000				

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	4.200	
00940	CHLORIDE,TOTAL MG/L AS CL	102.000	
00945	SULFATE,TOTAL MG/L AS SO4	145.000	
00951	FLUORIDE,TOTAL MG/L AS F	0.190	4.000
00956	SILICA,TOTAL MG/L AS SIO2	19.000	
01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	1.000 <	50.000
01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	90.000	1000.000
01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	0.500 <	
01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	260.000	
01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	3.000 <	10.000
01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	5.000 <	50.000
01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000 <	
01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	3.000 <	5000.000
01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	120.000	1000.000
01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000 <	50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	13.000	150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	7.000	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000 <	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	149.000	
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000 <	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	43.000	5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	2.000	10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	819.000	
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	700.000	
71900	MERCURY,TOTAL UG/L AS HG	0.050 <	2.000

SAMPLE NO: D86881700 LOCATION: PERIN/WELL 3 COLL DATE: 11/07/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: R TATLOCK LAB RCVD: 11/09/88 RECEIVED BY: TJW
SMPL PURP: 0-VARIANCE COMMENTS: VOCS LAB COMPL: 11/21/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 11/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L CG/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000			
431WV00	004	32104	BROMOFORM UG/L CG/MS	UG/L	5.000			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L CG/MS	UG/L	1.000 <	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

431WV00	017	78131	TOLUENE UG/L	UG/L	1.000	<
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000	<
431WV00	019	81551	XYLENE UG/L	UG/L	1.000	<

SAMPLE NO: D86633500 LOCATION: PEKIN/#3 WELL COLL DATE: 07/18/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 07/19/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 07/28/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 07/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	2.000				
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	5.000				
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000	<	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000	<	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000	<	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	7.000				
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000	<			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000	<			
431WV00	016	78124	BENZENE UG/L	UG/L	6.000		5.000*		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000	<			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000	<			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000	<			

SAMPLE NO: D86471700 LOCATION: PEKIN/WELL 3 COLL DATE: 05/05/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 05/06/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCTS LAB COMPL: 05/26/88 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 05/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000	<			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	3.000				
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	10.000				
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000	<			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000	<			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000	<			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000	<	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000	<	200.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	7.000	
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <	
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <	
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <	
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <	
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <	

SAMPLE NO: D86214800 LOCATION: IL AMERICAN WTR CMPNY-PEKIN/WELL 1 COLL DATE: 01/25/88 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 01/26/88 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOC'S LAB COMPL: 02/16/88 LAB SUPERVISOR: JTR
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 01/88 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431WV00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			
431WV00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431WV00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431WV00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431WV00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	009	34531	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	5.000		
431WV00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431WV00	011	32102	CARBON TETRACHLORIDE UG/L GC/MS	UG/L	1.000 <	5.000		
431WV00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431WV00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431WV00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <			
431WV00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000		
431WV00	017	78131	TOLUENE UG/L	UG/L	1.000 <			
431WV00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <			
431WV00	019	81551	XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D76050200 LOCATION: IL AMERICAN WTR CMPNY-PEKIN/WELL 3 COLL DATE: 11/02/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 11/03/87 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOC'S LAB COMPL: 02/11/88 LAB SUPERVISOR: JTR
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 11/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A 00	001	32106	CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A 00	002	32101	BROMODICHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	003	32105	DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	1.000 <			
431A 00	004	32104	BROMOFORM UG/L GC/MS	UG/L	1.000 <			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

431A	00	005	34423	METHYLENE CHLORIDE UG/L	UG/L	1.000 <	
431A	00	006	34501	1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000
431A	00	007	34496	1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	
431A	00	008	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	
431A	00	009	77279	1,2-DICHLOROETHANE UG/L	UG/L	1.000 <	
431A	00	010	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000
431A	00	011	32102	CARBON TETRACHLORIDE UG/L CG/MS	UG/L	1.000 <	5.000
431A	00	012	39180	TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000
431A	00	013	34475	TETRACHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	
431A	00	014	34301	CHLOROBENZENE UG/L	UG/L	1.000 <	
431A	00	015	34716	DICHLOROBENZENE UG/L	UG/L	1.000 <	
431A	00	016	78124	BENZENE UG/L	UG/L	1.000 <	5.000
431A	00	017	78131	TOLUENE UG/L	UG/L	1.000 <	
431A	00	018	78113	ETHYLBENZENE UG/L	UG/L	1.000 <	
431A	00	019	81551	XYLENE UG/L	UG/L	1.000 <	

SAMPLE NO: D75857200 LOCATION: PEKIN WELL 3 COLL DATE: 08/24/87 DELIVERED BY: MAIL
SMPL TYPE: RAW COLLECTOR: L MOTCHLER LAB RCVD: 08/25/87 RECEIVED BY: D V
SMPL PURP: 9-VARIANCE COMMENTS: VOCS LAB COMPL: 09/09/87 LAB SUPERVISOR: JTH
SMPL PROG: V-VOC OBSRVATNS: 2 VOC SMPL PERIOD: 08/87 FUND CODE: PW30

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
431A	00	001	32106 CHLOROFORM UG/L GC/MS	UG/L	1.000 <			
431A	00	002	32101 BROMODICHLOROMETHANE UG/L CG/MS	UG/L	1.000			
431A	00	003	32105 DIBROMOCHLOROMETHANE UG/L GC/MS	UG/L	4.000			
431A	00	004	32104 BROMOFORM UG/L CG/MS	UG/L	9.000			
431A	00	005	34423 METHYLENE CHLORIDE UG/L	UG/L	1.000 <			
431A	00	006	34501 1,1-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <	7.000		
431A	00	007	34496 1,1-DICHLOROETHANE UG/L GC/MS	UG/L	1.000 <			
431A	00	008	34546 TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	UG/L	1.000 <			
431A	00	009	77279 1,2-DICHLOROETHANE UG/L	UG/L	1.000 <			
431A	00	010	34506 1,1,1-TRICHLOROETHANE UG/L GC/MS	UG/L	1.000 <	200.000		
431A	00	011	32102 CARBON TETRACHLORIDE UG/L CG/MS	UG/L	1.000 <	5.000		
431A	00	012	39180 TRICHLOROETHYLENE UG/L	UG/L	1.000 <	5.000		
431A	00	013	34475 TETRACHLOROETHYLENE UG/L GC/MS	UG/L	3.000			
431A	00	014	34301 CHLOROBENZENE UG/L	UG/L	1.000 <			
431A	00	015	34716 DICHLOROBENZENE UG/L	UG/L	1.000 <			
431A	00	016	78124 BENZENE UG/L	UG/L	1.000 <	5.000		
431A	00	017	78131 TOLUENE UG/L	UG/L	1.000 <			
431A	00	018	78113 ETHYLBENZENE UG/L	UG/L	1.000 <			
431A	00	019	81551 XYLENE UG/L	UG/L	1.000 <			

SAMPLE NO: D758031 LOCATION: PEKIN IAWC WELL 3 COLL DATE: 07/23/87 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: WM MCMILLAN LAB RCVD: 07/30/87 RECEIVED BY:
SMPL PURP: 2-CHECK COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 07/87 FUND CODE: 30

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00010	WATER TEMPERATURE DEG C		14.800			
		00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		600.000			
		00094	CONDUCTIVITY - FIELD (UMHOS/CM @ 25 C)		1015.000			
		00400	PH PH UNITS		7.210			
		32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
		32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
		32104	BROMOFORM UG/L GC/MS		10.000			
		32105	DIBROMOCHLOROMETHANE UG/L GC/MS		3.000			
		32106	CHLOROFORM UG/L GC/MS		1.000 <			
		34301	CHLOROBENZENE UG/L		1.000 <			
		34423	METHYLENE CHLORIDE UG/L		1.000 <			
		34475	TETRACHLOROETHYLENE UG/L GC/MS		5.000			
		34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
		34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		
		34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		4.000	200.000		
		34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
		34716	DICHLOROBENZENE UG/L		1.000 <			
		39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
		72037	PUMPING RATE GPM		1750.000			
		77279	1,2-DICHLOROETHANE UG/L		1.000 <			
		78113	ETHYLBENZENE UG/L		1.000 <			
		78124	BENZENE UG/L		1.000 <	5.000		
		78131	TOLUENE UG/L		1.000 <			
		81551	XYLENE UG/L		1.000 <			

SAMPLE NO: Z001682 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.300			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		10.000			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		2.100			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		2.500			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34501	1,1-DICHLOROETHYLENE UG/L GC/MS		1.000 <	7.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	015	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS	1.000	<	200.000
0000001	016	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS	1.000	<	
0000001	017	34571	PARA-DICHLOROBENZENE UG/L	1.000	<	75.000
0000001	018	39180	TRICHLOROETHYLENE UG/L	1.000	<	5.000
0000001	019	00010	WATER TEMPERATURE DEG C	15.000		
0000001	020	00059	FLOW (PUMPING) RATE GAL/MIN	1750.000		
0000001	021	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	596.000		
0000001	022	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	1015.000		
0000001	023	00400	PH PH UNITS	7.200		
0000001	024	00410	ALKALINITY,TOTAL MG/L AS CACO3	366.000		
0000001	025	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	300.000		
0000001	026	90410		319.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 05 WELL 5 STATUS: A
RAW SRCE: 50060 WELL 5 AT 1200 WILLOW ST STATUS: A

SAMPLE NO: Z001690 LOCATION: WELL COLL DATE: 03727786 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00700700 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00700700 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03786 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		4.700		10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010	<			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010	<	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		136.000				
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		57.000				
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		73.000				
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.300				
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		147.000				
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		162.000				
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.180		4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		19.000				
0000001	013	00956	SILICA,TOTAL MG/L AS SIO2		19.000				
0000001	014	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
0000001	015	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		103.000		1000.000		
0000001	016	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		1.000	<			
0000001	017	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		362.000				
0000001	018	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
0000001	019	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
0000001	020	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
0000001	021	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000	<	5000.000		
0000001	022	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000	<	1000.000		
0000001	023	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
0000001	024	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000	<	150.000		
0000001	025	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	026	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	3.000	<	50.000
0000001	027	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	151.000		
0000001	028	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000	<	
0000001	029	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	50.000	<	5000.000
0000001	030	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	<	
0000001	031	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
0000001	032	32730	PHENOLS, TOTAL RECOVERABLE UG/L	10.000		
0000001	033	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	912.000		
0000001	034	71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000
0000001	035	00010	WATER TEMPERATURE DEG C	14.500		
0000001	036	00059	FLOW (PUMPING) RATE GAL/MIN	1700.000		
0000001	037	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	183.000		
0000001	038	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	1250.000		
0000001	039	00400	PH PH UNITS	7.000		
0000001	040	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	278.000		
0000001	041	90410		324.000		

SAMPLE ND: Z001691 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		4.700		10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010	<			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010	<	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		135.000				
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		56.000				
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		73.000				
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.300				
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		146.000				
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		160.000				
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.160		4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		19.000				
0000001	013	00956	SILICA,TOTAL MG/L AS SIO2		19.000				
0000001	014	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
0000001	015	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		100.000		1000.000		
0000001	016	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		2.000	<			
0000001	017	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		340.000				
0000001	018	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
0000001	019	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
0000001	020	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
0000001	021	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000	<	5000.000		
0000001	022	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000	<	1000.000		
0000001	023	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
0000001	024	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000	<	150.000		
0000001	025	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000	<			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	026	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	3.000	<	50.000
0000001	027	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	148.000		
0000001	028	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000	<	
0000001	029	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	50.000	<	5000.000
0000001	030	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	<	
0000001	031	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
0000001	032	32730	PHENOLS, TOTAL RECOVERABLE UG/L	5.000	<	
0000001	033	70300	RESIDUE,TOTAL FILTERABLE 0180 C,MG/L	853.000		
0000001	034	71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000
0000001	035	00010	WATER TEMPERATURE DEG C	14.500		
0000001	036	00059	FLOW (PUMPING) RATE GAL/MIN	1700.000		
0000001	037	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	183.000		
0000001	038	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	1250.000		
0000001	039	00400	PH PH UNITS	7.000		
0000001	040	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	278.000		
0000001	041	90410		322.000		

SAMPLE NO: 8036079 LOCATION: WELL #5 COLL DATE: 03/22/84 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 05/23/84 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: 1-GWM INORG OBSRVATNS: SMPL PERIOD: 03/84 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1260.000				
		00403	PH LABORATORY UNITS		7.400				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		331.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		4.600		10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		548.000				
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		124.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		55.000				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		62.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		3.100				
		00940	CHLORIDE,TOTAL MG/L AS CL		117.000				
		00945	SULFATE,TOTAL MG/L AS SO4		168.000				
		00951	FLUORIDE,TOTAL MG/L AS F		0.700		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		18.000				
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		91.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		1.000	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		330.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		7.000				
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000	<	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000	<	1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		0.500	<	50.000		

FACILITY: I795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	5.000 <	150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	13.000	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000 <	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	135.000	
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000 <	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	6.000	5000.000
01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	2.000	10.000
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	829.000	
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	760.000	
71900	MERCURY,TOTAL UG/L AS HG	0.100 <	2.000

SAMPLE NO: Z001689 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
0000001	015	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	016	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	017	00010	WATER TEMPERATURE DEG C		14.500			
0000001	018	00059	FLOW (PUMPING) RATE GAL/MIN		1700.000			
0000001	019	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		183.000			
0000001	020	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1250.000			
0000001	021	00400	PH PH UNITS		7.000			
0000001	022	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		278.000			
0000001	023	90410			324.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 06 WELL 6 STATUS: A
RAW SRCE: 50061 WELL 6 AT 1200 WILLOW ST STATUS: A

SAMPLE NO: 2001693 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: 1-GWM INORG OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		4.600	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		137.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		56.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		139.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.400			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		184.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		198.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.120	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		20.000			
0000001	013	00956	SILICA,TOTAL MG/L AS SIO2		20.000			
0000001	014	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	015	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		91.000	1000.000		
0000001	016	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		1.000 <			
0000001	017	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		650.000			
0000001	018	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
0000001	019	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
0000001	020	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
0000001	021	01042	COPPER,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <	5000.000		
0000001	022	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000 <	1000.000		
0000001	023	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	024	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000 <	150.000		
0000001	025	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <			
0000001	026	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	027	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		148.000			
0000001	028	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000 <			
0000001	029	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000 <	5000.000		
0000001	030	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000 <			
0000001	031	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		2.000	10.000		
0000001	032	32730	PHENOLS, TOTAL RECOVERABLE UG/L		5.000 <			
0000001	033	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		1010.000			
0000001	034	71900	MERCURY,TOTAL UG/L AS HG		0.010 <	2.000		
0000001	035	00010	WATER TEMPERATURE DEG C		15.000			
0000001	036	00059	FLOW (PUMPING) RATE GAL/MIN		1700.000			
0000001	037	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		141.000			
0000001	038	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1490.000			
0000001	039	00400	PH PH UNITS		7.100			
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		60.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	041	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	72.000
0000001	042	90410		369.000

SAMPLE NO: B018269 LOCATION: WELL #6 COLL DATE: 12/14/82 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 01/24/83 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 12/82 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1270.000			
		00403	PH LABORATORY UNITS		7.500			
		00410	ALKALINITY,TOTAL MG/L AS CACO3		333.000			
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		4.800	10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005 <	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		530.000			
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		132.000			
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		57.200			
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		56.000			
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.300			
		00940	CHLORIDE,TOTAL MG/L AS CL		109.000			
		00945	SULFATE,TOTAL MG/L AS SO4		194.000			
		00951	FLUORIDE,TOTAL MG/L AS F		0.880	4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		19.000			
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		89.000	1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		360.000			
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		15.000	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		20.000	1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000 <	150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		17.000			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		5.000 <	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		155.000			
		01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		4.000 <			
		01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		74.000	5000.000		
		01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		2.000	10.000		
		70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L		859.000			
		70304	TOTAL DISSOLVED SOLIDS MG/L BY EC		760.000			
		71900	MERCURY,TOTAL UG/L AS HG		0.050 <	2.000		

SAMPLE NO: Z001692 LOCATION: WELL COLL DATE: 03/27/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 03/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
0000001	015	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	016	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	017	00010	WATER TEMPERATURE DEG C		15.000			
0000001	018	00059	FLOW (PUMPING) RATE GAL/MIN		1700.000			
0000001	019	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		141.000			
0000001	020	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		1490.000			
0000001	021	00400	PH PH UNITS		7.100			
0000001	022	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		60.000			
0000001	023	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		72.000			
0000001	024	90410			369.000			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 07 WELL 7 STATUS: A
RAW SRCE: 50062 WELL 7 AT 125 EDDS AVE STATUS: A

SAMPLE NO: Z001675 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		6.400	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		64.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		29.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		47.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		1.200			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL	7.900		
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4	98.000		
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F	0.230		4.000
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2	17.000		
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	1.000	<	50.000
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	112.000		1000.000
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	0.500	<	
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	142.000		
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	3.000	<	10.000
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	5.000	<	50.000
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000	<	
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	5.000	<	5000.000
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	3390.000		1000.000*
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000	<	50.000
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	174.000		150.000*
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	5.000	<	
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	3.000	<	50.000
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	340.000		
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	5.000	<	
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	50.000	<	5000.000
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP	50.000	<	
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	1.000		10.000
0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L	5.000	<	
0000001	032	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	650.000		
0000001	033	71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000
0000001	034	00010	WATER TEMPERATURE DEG C	13.500		
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN	1600.000		
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	364.000		
0000001	037	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	665.000		
0000001	038	00400	PH PH UNITS	7.500		
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3	260.000		
0000001	040	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	65.000		
0000001	041	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	70.000		
0000001	042	90410		264.000		

SAMPLE NO: B043197 LOCATION: WELL #7 COLL DATE: 04/27/82 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 06/02/82 RECEIVED BY:
SMPL PURP: 1-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: 1-GWM INORG OBSRVATNS: SMPL PERIOD: 04/82 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		670.000				
		00403	PH LABORATORY UNITS		7.600				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		245.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		5.800			10.000	
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<		0.200	
		00900	HARDNESS,EDTA MG/L AS CACO3		344.000				

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	81.000	
00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP	34.000	
00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP	7.000	
00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP	0.900	
00940	CHLORIDE,TOTAL MG/L AS CL	6.400	
00945	SULFATE,TOTAL MG/L AS SO4	80.000	
00951	FLUORIDE,TOTAL MG/L AS F	0.200	4.000
00956	SILICA,TOTAL MG/L AS SIO2	18.000	
01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS	1.000 <	50.000
01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP	40.000	1000.000
01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP	0.500 <	
01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP	60.000	
01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB	3.000 <	10.000
01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB	5.000 <	50.000
01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP	5.000 <	
01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP	3.000 <	5000.000
01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP	10.000	1000.000
01051	LEAD,TOTAL RECOVERABLE UG/L AS PB	5.000 <	50.000
01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP	5.000 <	150.000
01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP	3.000 <	
01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP	5.000 <	50.000
01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP	69.000	
01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000 <	
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	2.000 <	5000.000
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	2.000	10.000
70300	RESIDUE,TOTAL FILTERABLE 0180 C,MG/L	421.000	
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	400.000	
71900	MERCURY,TOTAL UG/L AS HG	0.050 <	2.000

SAMPLE NO: Z001674 LOCATION: WELL COLL DATE: 01713786 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00700700 RECEIVED BY:
SMPL PURP: S-SPEC/OTHR COMMENTS: LAB COMPL: 00700700 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 01786 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	014	34501	1,1-DICHLORDETHYLENE UG/L GC/MS	1.000 <	7.000
0000001	015	34506	1,1,1-TRICHLORDETHANE UG/L GC/MS	1.000 <	200.000
0000001	016	34571	PARA-DICHLOROBENZENE UG/L	1.000 <	75.000
0000001	017	39180	TRICHLORDETHYLENE UG/L	1.000 <	5.000
0000001	018	00010	WATER TEMPERATURE DEG C	13.500	
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN	1600.000	
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (FH) MILLIVOLTS	364.000	
0000001	021	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	665.000	
0000001	022	00400	PH PH UNITS	7.500	
0000001	023	00410	ALKALINITY,TOTAL MG/L AS CACO3	260.000	
0000001	024	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	65.000	
0000001	025	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	70.000	
0000001	026	90410		264.000	

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN STATUS: A PUBLIC: Y COMM: Y TYPE WATER: G
TAP: 08 WELL 8 STATUS: A
RAW SRCE: 50063 WELL 8 AT 2222 LAKECREST DR STATUS: A

SAMPLE NO: Z001705 LOCATION: WELL
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR
SMPL PURP: 5-SPEC/OTHR COMMENTS:
SMPL PROG: R-GWM PEST OBSRVATUS:

COLL DATE: 01/13/86 DELIVERED BY:
LAB RCVD: 00/00/00 RECEIVED BY:
LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	39023	PHORATE UG/L		0.050 <			
0000001	002	39300	P,P'-DDT UG/L		0.010 <			
0000001	003	39305	O,P'-DDT UG/L		0.010 <			
0000001	004	39310	P,P'-DDD UG/L		0.010 <			
0000001	005	39315	O,P'-DDD UG/L		0.010 <			
0000001	006	39320	P,P'-DDE UG/L		0.010 <			
0000001	007	39327	O,P'-DDE UG/L		0.010 <			
0000001	008	39330	ALDRIN UG/L		0.010 <	1.000		
0000001	009	39340	LINDANE UG/L		0.010 <	4.000		
0000001	010	39380	DIELDRIN UG/L		0.010 <	1.000		
0000001	011	39390	ENDRIN UG/L		0.010 <	0.200		
0000001	012	39398	ETHION UG/L		0.050 <			
0000001	013	39400	TOXAPHENE UG/L		1.000 <	5.000		
0000001	014	39410	HEPTACHLOR UG/L		0.010 <	0.100		
0000001	015	39420	HEPTACHLOR EPOXIDE UG/L		0.010 <	0.100		
0000001	016	39480	METHOXYCHLOR UG/L		0.050 <	100.000		
0000001	017	39516	TOTAL PCB'S UG/L		0.100 <			
0000001	018	39530	MALATHION UG/L		0.050 <			
0000001	019	39570	DIAZINON UG/L		0.050 <			
0000001	020	39600	METHYL PARATHION UG/L		0.050 <			
0000001	021	39730	2,4-D UG/L		0.100 <	10.000		
0000001	022	39760	SILVEX UG/L		0.050 <	10.000		
0000001	023	39810	GAMMA CHLORDANE UG/L		0.010 <			
0000001	024	81294	DYFONATE UG/L		0.050 <			

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PERIN *** CONTINUED ***

0000001	025	81403	DURSBAN UG/L	0.050	<
0000001	026	82088	TERBUFOS (COUNTER) UG/L	0.050	<
0000001	027	00010	WATER TEMPERATURE DEG C	12.900	
0000001	028	00059	FLOW (PUMPING) RATE GAL/MIN	1750.000	
0000001	029	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	340.000	
0000001	030	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C	735.000	
0000001	031	00400	PH PH UNITS	7.300	
0000001	032	00410	ALKALINITY,TOTAL MG/L AS CACO3	278.000	
0000001	033	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	60.000	
0000001	034	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	63.000	
0000001	035	90410		282.000	

SAMPLE NO: 2001704 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSTS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100 <			
0000001	002	00630	NITRATE & NITRITE TOTAL MG/L AS N		5.600	10.000		
0000001	003	00665	PHOSPHORUS, TOTAL MG/L AS P		0.010 <			
0000001	004	00720	CYANIDE,TOTAL MG/L AS CN		0.010 <	0.200		
0000001	005	00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		89.000			
0000001	006	00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		40.000			
0000001	007	00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		11.000			
0000001	008	00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.300			
0000001	009	00940	CHLORIDE,TOTAL MG/L AS CL		30.000			
0000001	010	00945	SULFATE,TOTAL MG/L AS SO4		76.000			
0000001	011	00951	FLUORIDE,TOTAL MG/L AS F		0.210	4.000		
0000001	012	00956	SILICA,TOTAL MG/L AS SIO2		15.000			
0000001	013	01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000 <	50.000		
0000001	014	01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		67.000	1000.000		
0000001	015	01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500 <			
0000001	016	01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		82.000			
0000001	017	01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000 <	10.000		
0000001	018	01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000 <	50.000		
0000001	019	01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000 <			
0000001	020	01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		5.000 <	5000.000		
0000001	021	01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		50.000 <	1000.000		
0000001	022	01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000 <	50.000		
0000001	023	01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		8.000	150.000		
0000001	024	01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		5.000 <			
0000001	025	01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		3.000 <	50.000		
0000001	026	01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		118.000			
0000001	027	01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP		5.000 <			
0000001	028	01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP		50.000 <	5000.000		
0000001	029	01105	ALUMINUM,TOTAL RECOVERABLE UG/L ASAL ANAL BY ICP		50.000 <			
0000001	030	01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE		4.000	10.000		

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

0000001	031	32730	PHENOLS, TOTAL RECOVERABLE UG/L	5.000	<	
0000001	032	70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/LP	599.000		
0000001	033	71900	MERCURY,TOTAL UG/L AS HG	0.010	<	2.000
0000001	034	00010	WATER TEMPERATURE DEG C	12.900		
0000001	035	00059	FLOW (PUMPING) RATE GAL/MIN	1750.000		
0000001	036	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS	340.000		
0000001	037	00095	CONDUCTIVITY(EC)-LAB(OMHOS/CM @ 25 C	735.000		
0000001	038	00400	PH PH UNITS	7.300		
0000001	039	00410	ALKALINITY,TOTAL MG/L AS CACO3	278.000		
0000001	040	72000	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN	60.000		
0000001	041	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE	63.000		
0000001	042	90410		282.000		

SAMPLE NO: B043198 LOCATION: WELL #8 COLL DATE: 04/27/82 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: L MUTCHLER LAB RCVD: 06/02/82 RECEIVED BY:
SMPL PURP: I-ROUTINE COMMENTS: LAB COMPL: LAB SUPERVISOR:
SMPL PROG: I-GWM INORG OBSRVATNS: SMPL PERIOD: 04/82 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT		STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
		00095	CONDUCTIVITY(EC)-LAB(OMHOS/CM @ 25 C		730.000				
		00403	PH LABORATORY UNITS		7.400				
		00410	ALKALINITY,TOTAL MG/L AS CACO3		280.000				
		00610	NITROGEN,AMMONIA TOTAL MG/L AS N		0.100	<			
		00630	NITRATE & NITRITE TOTAL MG/L AS N		3.000		10.000		
		00720	CYANIDE,TOTAL MG/L AS CN		0.005	<	0.200		
		00900	HARDNESS,EDTA MG/L AS CACO3		364.000				
		00916	CALCIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		89.000				
		00927	MAGNESIUM,TOTAL RECOVERABLE MG/L AS CA ANAL BY ICP		36.700				
		00929	SODIUM,TOTAL RECOVERABLE MG/L AS NA ANAL BY ICP		14.000				
		00937	POTASSIUM,TOTAL RECOVERABLE MG/L AS K ANAL BY ICP		2.700				
		00940	CHLORIDE,TOTAL MG/L AS CL		20.000				
		00945	SULFATE,TOTAL MG/L AS SO4		79.000				
		00951	FLUORIDE,TOTAL MG/L AS F		0.760		4.000		
		00956	SILICA,TOTAL MG/L AS SIO2		15.000				
		01002	ARSENIC,TOTAR RECOVERABLE UG/L AS AS		1.000	<	50.000		
		01007	BARIUM,TOTAL RECOVERABLE UG/L AS BA ANAL BY ICP		61.000		1000.000		
		01012	BERYLLIUM,TOTAL RECOVERABLE UG/L AS BE ANAL BY ICP		0.500	<			
		01022	BORON,TOTAL RECOVERABLE UG/L AS B ANAL BY ICP		90.000				
		01027	CADMIUM,TOTAL RECOVERABLE UG/L AS CD ANAL BY ICB		3.000	<	10.000		
		01034	CHROMIUM,TOTAL RECOVERABLE UG/L ASCR ANAL BY ICB		5.000	<	50.000		
		01037	COBALT,TOTAL RECOVERABLE UG/L AS CO ANAL BY ICP		5.000	<			
		01042	COPPER,TOTAL RECOVERABLE UG/L AS CU ANAL BY ICP		3.000	<	5000.000		
		01045	IRON,TOTAL RECOVERABLE, UG/L AS FEANAL BY ICP		90.000		1000.000		
		01051	LEAD,TOTAL RECOVERABLE UG/L AS PB		5.000	<	50.000		
		01055	MANGANESE,TOTAL RECOVERABLE UG/L AS MN ANAL BY ICP		5.000	<	150.000		
		01067	NICKEL,TOTAL RECOVERABLE UG/L AS NI ANAL BY ICP		3.000	<			
		01077	SILVER,TOTAL RECOVERABLE UG/L AS AG ANAL BY ICP		5.000	<	50.000		
		01082	STRONTIUM,TOTAL RECOVERABLE UG/L AS SR ANAL BY ICP		97.000				

FACILITY: 1795040 IL AMERICAN WTR CMPNY-PEKIN *** CONTINUED ***

01087	VANADIUM,TOTAL RECOVERABLE UG/L ASV ANAL BY ICP	4.000 <		
01092	ZINC,TOTAL RECOVERABLE UG/L AS ZN ANAL BY ICP	2.000 <	5000.000	
01147	SELENIUM,TOTAL RECOVERABLE UG/L ASSE	4.000	10.000	
70300	RESIDUE,TOTAL FILTERABLE @180 C,MG/L	398.000		
70304	TOTAL DISSOLVED SOLIDS MG/L BY EC	440.000		
71900	MERCURY,TOTAL UG/L AS HG	0.050 <	2.000	

SAMPLE NO: Z001703 LOCATION: WELL COLL DATE: 01/13/86 DELIVERED BY:
SMPL TYPE: RAW COLLECTOR: IEPA SMPL COLLECTOR LAB RCVD: 00/00/00 RECEIVED BY:
SMPL PURP: 5-SPEC/OTHR COMMENTS: LAB COMPL: 00/00/00 LAB SUPERVISOR:
SMPL PROG: V-VOC OBSRVATNS: SMPL PERIOD: 01/86 FUND CODE:

ANALYSIS ID	RSLT NO	STORET NO	DESCRIPTION	UNITS	RESULT	STANDARDS DRINK WTR	STANDARDS RAW WTR	TRIGGER LEVEL
0000001	001	32101	BROMODICHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	002	32102	CARBON TETRACHLORIDE UG/L GC/MS		1.000 <	5.000		
0000001	003	32103	1,2-DICHLOROETHANE UG/L		1.000 <	5.000		
0000001	004	32104	BROMOFORM UG/L GC/MS		1.000 <			
0000001	005	32105	DIBROMOCHLOROMETHANE UG/L GC/MS		1.000 <			
0000001	006	32106	CHLOROFORM UG/L GC/MS		1.000 <			
0000001	007	34010	TOLUENE UG/L		1.000 <			
0000001	008	34030	BENZENE UG/L		1.000 <	5.000		
0000001	009	34301	CHLOROBENZENE UG/L		1.000 <			
0000001	010	34371	ETHYLBENZENE UG/L		1.000 <			
0000001	011	34423	METHYLENE CHLORIDE UG/L		1.000 <			
0000001	012	34475	TETRACHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	013	34496	1,1-DICHLOROETHANE UG/L GC/MS		1.000 <			
0000001	014	34506	1,1,1-TRICHLOROETHANE UG/L GC/MS		1.000 <	200.000		
0000001	015	34546	TRANS-1,2-DICHLOROETHYLENE UG/L GC/MS		1.000 <			
0000001	016	34571	PARA-DICHLOROBENZENE UG/L		1.000 <	75.000		
0000001	017	39180	TRICHLOROETHYLENE UG/L		1.000 <	5.000		
0000001	018	00010	WATER TEMPERATURE DEG C		12.900			
0000001	019	00059	FLOW (PUMPING) RATE GAL/MIN		1750.000			
0000001	020	00090	OXIDATION-REDUCTION POTENTIAL (EH) MILLIVOLTS		340.000			
0000001	021	00095	CONDUCTIVITY(EC)-LAB(UMHOS/CM @ 25 C		735.000			
0000001	022	00400	PH PH UNITS		7.300			
0000001	023	00410	ALKALINITY,TOTAL MG/L AS CACO3		278.000			
0000001	024	72004	FLOW (PUMPING) TIME PRIOR TO SAMPLING MIN		60.000			
0000001	025	72019	DEPTH FROM LAND SURFACE TO WATER SURFACE		63.000			
0000001	026	90410			282.000			

APPENDIX H

Illinois
Environmental
Protection Agency

Office of Chemical Safety
2200 Churchill Road, P.O. Box 19276
Springfield, Illinois 62794-9276

IEPA/ENV/87-001-9 July, 1987

- BENZENE -
CHEMICAL INFORMATION SHEET*

WHAT IS BENZENE?

Benzene is a clear, colorless, volatile liquid which has been commercially produced and used since the 1860's. It ranks 16th in production among all chemicals in the United States; an estimated 9.9 billion pounds was produced in 1981. Benzene is used as a constituent of gasoline and diesel fuel, generally comprising 1 to 3 percent of gasoline by weight. Benzene is also a by-product of petroleum and coal and is used as a raw material in the production of other industrial chemicals which, in turn, are used to manufacture a wide range of products, including plastics, nylon, and insecticides.

WHAT IS THE OCCURRENCE OF BENZENE IN THE ENVIRONMENT?

Benzene enters the environment from both natural and artificial sources. Benzene is a natural constituent of crude oil and is produced from forest fires and smoldering wood, as well as from cigarette smoke. Benzene enters the environment artificially from production, storage, transport, venting, and combustion of gasoline; from production, storage, and transport of benzene itself; during production of other chemicals from benzene; and as a result of spills. Benzene has been detected in air, surface water, well water, raw and finished drinking water, industrial plant discharges, soil, food, and tobacco smoke.

Human populations are primarily exposed to benzene from the air particularly in areas with heavy traffic, around filling stations, and near manufacturing plants which produce or use benzene. It has been determined that during a 15 minute period, a person is exposed to 1-2 ppm of benzene while pumping his/her own gasoline. Although most public drinking water supplies are free of benzene, it can be found in wells that have been contaminated by leaky gasoline storage tanks, landfills, or spills. Since benzene is fairly volatile, much of the chemical near the soil surface or in open water will evaporate to the atmosphere. Benzene located below the soil surface is relatively mobile and breaks down slowly and, therefore, it can be expected to leach into groundwater.

WHAT ARE THE HEALTH EFFECTS ASSOCIATED WITH BENZENE EXPOSURE?

Short-term exposure -- After exposure to a large amount of benzene, by ingestion or by breathing vapors, the major toxic effect is on the central nervous system. Symptoms from mild exposure include dizziness, weakness, euphoria, headache, nausea, vomiting, tightness in the chest, and staggering.

If exposure is more severe, symptoms progress to blurred vision, tremors, shallow and rapid breathing, heart irregularities, paralysis, and unconsciousness. Exposure in the region of 25,000 ppm in air is rapidly fatal. Skin contact presents a possible route of absorption, but generally at a much lower rate than through breathing. It should be kept in mind that the mild central nervous system effects appear to be rapidly reversible and concentration-dependent.

Long-term exposure -- Although central nervous system and gastrointestinal effects may result from long-term benzene exposure, the important toxic manifestations are related to injury of the blood-forming system. Benzene damages the bone marrow. This damage results in a reduction in the levels of red and white blood cells and platelets in the blood which may be manifested by anemia, increased susceptibility to infections and/or a reduction in the blood's ability to clot. At early stages of such blood diseases, these effects appear to be reversible. However, exposure to high doses of benzene for longer periods of time may lead to an irreversible stage of the disease.

Benzene has been found to produce both tumors and leukemias in rats. There are many studies that have produced conclusive evidence linking benzene exposure to human leukemia. The US EPA considers the evidence sufficient to classify benzene as a known human carcinogen. Benzene also produces chromosomal changes or mutations in experimental animals.

HOW IS BENZENE REGULATED?

US EPA listed benzene as a hazardous air contaminant in 1977, and has begun controlling benzene air emissions from major industries and other stationary sources. Benzene has also been identified as one of the chemicals on US EPA's list of priority water pollutants. US EPA has developed an ambient water quality criterion for benzene at 0.66 ppb (parts per billion) based on the risk to human health from consumption of contaminated water and fish. A Maximum Contaminant Level (MCL) of 5 ppb in drinking water has been established under the Safe Drinking Water Act. Threshold limit values adopted by the American Conference of Governmental Industrial Hygienists for regulation of workplace exposures refer to airborne concentrations of substances and represent conditions under which it is believed that nearly all healthy workers may be repeatedly exposed day after day without adverse effect. The threshold limit value for benzene is 10 ppm (parts per million) as an average eight hour exposure limit for a 5-day workweek.

CS:pmd2976/sp/1-2

*Note: This information sheet is a summary of readily available data regarding the general nature and effects of this chemical. The reader is encouraged to consult other sources or an appropriate professional if a more detailed explanation for specific concerns is desired.

March 31, 1987

1,1,1-TRICHLOROETHANE

Health Advisory
Office of Drinking Water
U.S. Environmental Protection Agency

I. INTRODUCTION

The Health Advisory (HA) Program, sponsored by the Office of Drinking Water (ODW), provides information on the health effects, analytical methodology and treatment technology that would be useful in dealing with the contamination of drinking water. Health Advisories describe nonregulatory concentrations of drinking water contaminants at which adverse health effects would not be anticipated to occur over specific exposure durations. Health Advisories contain a margin of safety to protect sensitive members of the population.

Health Advisories serve as informal technical guidance to assist Federal, State and local officials responsible for protecting public health when emergency spills or contamination situations occur. They are not to be construed as legally enforceable Federal standards. The HAs are subject to change as new information becomes available.

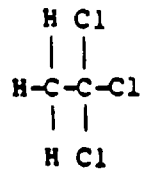
Health Advisories are developed for One-day, Ten-day, Longer-term (approximately 7 years, or 10% of an individual's lifetime) and Lifetime exposures based on data describing noncarcinogenic end points of toxicity. Health Advisories do not quantitatively incorporate any potential carcinogenic risk from such exposure. For those substances that are known or probable human carcinogens, according to the Agency classification scheme (Group A or B), Lifetime HAs are not recommended. The chemical concentration values for Group A or B carcinogens are correlated with carcinogenic risk estimates by employing a cancer potency (unit risk) value together with assumptions for lifetime exposure and the consumption of drinking water. The cancer unit risk is usually derived from the linear multistage model with 95% upper confidence limits. This provides a low-dose estimate of cancer risk to humans that is considered unlikely to pose a carcinogenic risk in excess of the stated values. Excess cancer risk estimates may also be calculated using the One-hit, Weibull, Logit or Probit models. There is no current understanding of the biological mechanisms involved in cancer to suggest that any one of these models is able to predict risk more accurately than another. Because each model is based on differing assumptions, the estimates that are derived can differ by several orders of magnitude.

This Health Advisory is based on information presented in the Office of Drinking Water's Health Effects Criteria Document (CD) for 1,1,1-Trichloroethane (U.S. EPA, 1984a). The HA and CD formats are similar for easy reference. Individuals desiring further information on the toxicological data base or rationale for risk characterization should consult the CD. The CD is available for review at each EPA Regional Office of Drinking Water counterpart (e.g., Water Supply Branch or Drinking Water Branch), or for a fee from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161, PB # 86-118130/AS. The toll free number is (800) 336-4700; in the Washington, D.C. area: (703) 487-4650.

II. GENERAL INFORMATION AND PROPERTIES

CAS No. 71-55-6

Chemical Structure



Synonyms

- 1,1,1-TCA, methyl chloroform, ethane, 1,1,1-trichloro and methyltrichloromethane.

Uses

- In the cleaning and vapor degreasing of fabricated metal parts
- In the synthesis of other organic chemicals
- As a spot remover and film cleaner
- As an additive in metal cutting oils

Properties (U.S. EPA 1984)

Chemical Formula	$C_2H_3Cl_3$
Molecular Weight	133.41
Physical State	colorless, nonflammable liquid
Boiling Point	74°C
Melting Point	--
Density	4.6
Vapor Pressure	100 mm Hg (25°C)
Water Solubility (25°C)	44 mg/L
Log Octanol/Water Partition Coefficient	--
Taste Threshold	--
Odor Threshold	--
Conversion Factor	5.4 mg/m^3

Occurrence

- 1,1,1-Trichloroethane is a synthetic chemical with no natural sources.

- Production of 1,1,1-trichloroethane was 600 million lbs in 1982 (U.S. ITC, 1983). About 70% of all 1,1,1-trichloroethane is used in metal cleaning.

- The major source of 1,1,1-trichloroethane released to the environment is from its use as a metal degreaser. Since 1,1,1-trichloroethane is not consumed during degreasing operations, the majority of all 1,1,1-trichloroethane production is released to the environment. Most of the releases occur to the atmosphere by evaporation. However, 1,1,1-trichloroethane which is not lost to evaporation becomes heavily contaminated with grease and oil and is disposed of by burial in landfills or dumping on the ground or into sewers. Because metal working operations are performed nationwide, 1,1,1-trichloroethane releases occur in all industrialized areas. Releases of 1,1,1-trichloroethane from other uses also may be significant.

- 1,1,1-Trichloroethane released to the air degrades slowly with an estimated half life of from 1 [illegible] s. 1,1,1-Trichloroethane released to surface waters migrates to the atmosphere in a few days or weeks. 1,1,1-Trichloroethane which is released to the land does not sorb onto soil and migrates readily to ground water. 1,1,1-Trichloroethane slowly hydrolyzes in water with an estimated half-life of greater than 6 months. 1,1,1-Trichloroethane, unlike other chlorinated compounds, does not bioaccumulate in individual animals or food chains.

- Because of the large and dispersed releases, 1,1,1-trichloroethane occurs widely in the environment. 1,1,1-Trichloroethane is ubiquitous in the air with levels in the low ppb range, and is a common contaminant in ground and surface waters with higher levels found in ground water. Surveys of drinking water supplies have found that 3% of all public systems derived from well water contain 1,1,1-trichloroethane at levels of 0.5 ug/L or higher. A small number of systems (0.1%) have levels higher than 100 ug/L. Public systems derived from surface water also have been found to contain 1,1,1-trichloroethane but at lower levels. 1,1,1-Trichloroethane has been reported to occur in some foods in the ppb range.

- The major sources of exposure to 1,1,1-trichloroethane are from contaminated water and, to a lesser extent, air. Food is only a minor source.

III. PHARMACOKINETICS

Absorption

- While inhalation of 1,1,1-TCA vapor through the lungs is the common route of entry into the body, 1,1,1-TCA also is absorbed rapidly and completely from the gastrointestinal tract (Stewart et al., 1969).

- Stewart and Andrews (1966) reported an observation of non-lethal acute intoxication after oral ingestion of a liquid ounce of 1,1,1-TCA (0.6 g/kg bw). The concentration of 1,1,1-TCA in the expired air was measured serially and found to be equivalent to an inhalation exposure of 500 ppm (2,700 mg/m^3) by experimental subjects.

- Monster et al. (1979) and Humbert and Fernandez (1977) reported 1,1,1-TCA retention in subjects exposed to 70 (378 mg/m^3) or 140 ppm (756 mg/m^3) respectively, to be 30 percent of the inspired air concentration at equilibrium after 4 hours of exposure.

Metabolism

- 1,1,1-TCA is metabolized to a very limited extent by animals and humans (Monster et al., 1979). The metabolites include trichloroethanol, TCA-glucuronide and trichloroacetic acid which are excreted primarily in urine; very small amounts of trichloroethanol (1 percent), however, are excreted unchanged by the lungs.

- Hake and his coworkers (1960), using C^{14}-labeled 1,1,1-TCA, determined that less than 3% of 1,1,1-TCA is metabolized by rats following a single intraperitoneal injection of 1,1,1-TCA.

- More recently, estimates of the extent of metabolism in the human have been made from controlled inhalation exposure with unlabeled 1,1,1-TCA (Seki et al., 1975; Humbert and Fernandez, 1977; Monster et al., 1979). From the experimentally determined retained dose and the amounts of 1,1,1-TCA metabolites excreted into the urine, no more than 6% of the dose is estimated to be metabolized.

- The metabolic fate of inhaled 1,1,1-TCA in rats and mice is not altered upon repeated exposures (Schumann et al., 1982).

Excretion

- Unchanged 1,1,1-TCA is primarily excreted via lungs.

IV. HEALTH EFFECTS

Humans

- Acute pulmonary congestion and edema typically are found in fatalities resulting from inhalation of 1,1,1-TCA (Capalan et al., 1976; Bonventre et al., 1977). Fatty vacuolation in the livers of the exposed subjects also has been observed (Capalan et al., 1976).

Animals

Short-term Exposure

- The acute oral LD_{50} for 1,1,1-TCA, as determined in several species of animals, ranges from 5.7 to 14.3 g/kg (Torkelson et al., 1958).

- Vainio et al. (1976) found that a single oral dose of approximately 1.4 g/kg depressed some hepatic microsomal metabolic indices in rats (including cytochrome P-450 and epoxide hydratase).

- Bruckner et al. (1985) observed that there was relatively little evidence of toxicity in a short-term study by gavage in rats receiving 1,1,1-TCA at 0.5 g/kg for 9 days. Higher doses of 5 and 10 g/kg caused transient hyperexcitability and protracted narcosis, as well as fatalities.

Long-term Exposure

- Bruckner et al. (1985) administered 1,1,1-TCA to rats by gavage 5 times weekly for up to 12 weeks at 0, 0.5, 2.5 or 5.0 g/kg. Rats given 2.5 or 5.0 g/kg exhibited reduced body weight gain and CNS effects. Approximately 35% of these rats died during the first 50 days of the experiment, but only the 5.0 g/kg group showed an increase in serum enzyme levels indicating an alteration in index of toxicity. Ingestion of 0.5 g/kg for 12 weeks did not result in alterations in indices of toxicity.

- McNutt et al. (1975) exposed mice continuously by inhalation to 1,1,1-TCA at 250 (1,365 mg/m^3) or 1,000 ppm (5,400 mg/m^3) for 14 weeks. Serial sacrifice of exposed and control mice from 1 to 14 weeks demonstrated significant changes in the centrilobular hepatocytes as well as evidence of triglyceride accumulation in the livers of the 1,000 ppm exposure group.

- In the NCI (1977) study, diminished body weight gain and decreased survival time were observed in both rats and mice. Male and female rats were given 750 or 1,500 mg/kg 1,1,1-TCA in corn oil by gavage 5 times weekly for 78 weeks. Similarly, male and female mice received approximately 2,800 or 5,600 mg/kg for 78 weeks.

- In the NTP bioassay (1983), rats and mice were gavaged 5 times weekly with 1,1,1-TCA in corn oil at doses of 375 or 750 mg/kg body weight (rats) and 1,500 or 3,000 mg/kg body weight (mice), respectively, for 103 weeks.

Reproductive Effects

- There appeared to be no dose-dependent effects on fertility, gestation, viability indices in mice exposed to 1,1,1-TCA at dose levels of 100, 300 or 1,000 mg/kg for 35 days (Lane et al., 1982).

Developmental Effects

- There appeared to be no dose-dependent effects on viability indices in mice exposed to 1,1,1-TCA at dose levels of 100, 300 or 1,000 mg/kg for 35 days (Lane et al., 1982).

Mutagenicity

- Simmon et al. (1977) reported that 1,1,1-TCA was mutagenic in various strains of *S. typhimurium*, with metabolic activation.
- Loprieno et al. (1979) stated that 1,1,1-TCA was not mutagenic in *Saccharomyces cerevisiae* or *Schizosaccharomyes bombe*.

Carcinogenicity

- NTP (1983) has reported a significant ($P < 0.05$) dose response trend and increased incidences of hepatocellular carcinomas in the low- and high-dose male and in the high-dose female mice exposed to 1,1,1-TCA for 103 weeks. However, it should be noted that these findings are based on the draft report and may change pending the outcome of the ongoing NTP audit of the study.

V. QUANTIFICATION OF TOXICOLOGICAL EFFECTS

Health Advisories (HAs) are generally determined for One-day, Ten-day, Longer-term (approximately 7 years) and Lifetime exposures if adequate data are available that identify a sensitive noncarcinogenic end point of toxicity. The HAs for noncarcinogenic toxicants are derived using the following formula:

$$HA = \frac{(NOAEL \text{ or } LOAEL) \times (BW)}{(UF) \times (___ \text{ L/day})} = ___ \text{ mg/L } (___ \text{ ug/L})$$

where:

NOAEL or LOAEL = No- or Lowest-Observed-Adverse-Effect-Level in mg/kg bw/day.

BW = assumed body weight of a child (10 kg) or an adult (70 kg).

UF = uncertainty factor (10, 100 or 1,000), in accordance with NAS/ODW guidelines.

___ L/day = assumed daily water consumption of a child (1 L/day) or an adult (2 L/day).

One-day Health Advisory

The study by Vainio et al. (1976) in rats is used in calculating a One-day HA. In this study, 1,1,1-TCA at a single oral dose of approximately 1.4 g/kg depressed hepatic microsomal metabolic indices (cytochrome P-450, epoxide hydratase) in rats. Using this dose as a NOAEL (although its significance is not well established), a One-day HA for the 10 kg child is calculated as follows:

$$\text{One-day HA} = \frac{(1.4\ \text{g/kg/day})\ (10\ \text{kg})}{(100)\ (1\ \text{L/day})} = 140\ \text{mg/L} \quad \text{or} \quad 140000\ \text{ug/L}$$

where:

1.4 g/kg/day = NOAEL based on absence of changes in hepatic microsomal metabolic indices in rats.

10 kg = assumed body weight of a child.

100 = uncertainty factor, chosen in accordance with NAS/ODW guidelines for use with a NOAEL from an animal study.

1 L/day = assumed daily water consumption of a child.

Ten-day Health Advisory

Insufficient toxicological data are available to derive a Ten-day HA for 1,1,1-TCA. However, in order to provide a health guidance level for 1,1,1-TCA for this duration of exposure, it is recommended that the Longer-term HA for the 10 kg child be used (35 mg/L or 35,000 ug/L).

Longer-term Health Advisory

A subchronic oral toxicity study in rats by Bruckner et al. (1985) is used for the Longer-term HA. In this study, rats (200 to 250 g) were given 1,1,1-TCA 5 times weekly by gavage for 12 weeks at 0, 0.5, 2.5 or 5 g/kg. Rats given 2.5 or 5.0 g/kg exhibited reduced body weight gain and CNS effects including transient hyperexcitability and protracted narcosis. Approximately 35% of these rats died during the first 50 days of the experiment, but only the 5.0 g/kg group showed an increase in serum enzyme levels. Ingestion of 0.5 g/kg for 12 weeks did not result in alteration in indices of toxicity (serum enzyme levels, organ weights or histopathological changes in the liver and kidney).

Using 0.5 g/kg/day as a NOAEL, a Longer-term HA for the 10 kg child is calculated as follows:

$$\text{Longer-term HA} = \frac{(500\ \text{mg/kg/day})\ (10\ \text{kg})\ (5/7)}{(100)\ (1\ \text{L/day})} = 35\ \text{mg/L}\ (35{,}000\ \text{ug/L})$$

where:

0.5 g/kg/day = NOAEL in a 12-week study based on absence of various parameters of toxicity in rats.

10 kg = assumed body weight of a child.

5/7 = conversion of 5 day/week exposure to daily exposure.

100 = uncertainty factor, chosen in accordance with NAS/ODW guidelines for use with a NOAEL from an animal study.

1 L/day = assumed daily water consumption of a child.

Longer-term HA for 70 kg adult:

$$\text{Longer-term HA} = \frac{(500\ \text{mg/kg/day})\ (70\ \text{kg})\ (5/7)}{(100)\ (2\ \text{L/day})} = 125\ \text{mg/L}\ (125{,}000\ \text{ug/L})$$

where:

0.5 g/kg/day = NOAEL in a 12-week study based on absence of various parameters of toxicity in rats.

70 kg = assumed body weight of an adult.

5/7 = conversion of 5 day/week exposure to daily exposure.

100 = uncertainty factor, chosen in accordance with NAS/ODW guidelines for use with a NOAEL from an animal study.

2 L/day = assumed daily water consumption of an adult.

Lifetime Health Advisory

The Lifetime HA represents that portion of an individual's total exposure that is attributed to drinking water and is considered protective of noncarcinogenic adverse health effects over a lifetime exposure. The Lifetime HA is derived in a three step process. Step 1 determines the Reference Dose (RfD), formerly called the Acceptable Daily Intake (ADI). The RfD is an estimate of a daily exposure to the human population that is likely to be without appreciable risk of deleterious effects over a lifetime, and is derived from the NOAEL (or LOAEL), identified from a chronic (or subchronic) study, divided by an uncertainty factor(s). From the RfD, a Drinking Water Equivalent Level (DWEL) can be determined (Step 2). A DWEL is a medium-specific (i.e., drinking water) lifetime exposure level, assuming 100% exposure from that medium, at which adverse, noncarcinogenic health effects would not be expected to occur. The DWEL is derived from the multiplication of the RfD by the assumed body weight of an adult and divided by the assumed daily water consumption of an adult. The Lifetime HA is determined in Step 3 by factoring in other sources of exposure, the relative source contribution (RSC). The RSC from drinking water is based on actual exposure data or, if data are not available, a value of 20% is assumed for synthetic organic chemicals and a value of 10% is assumed for inorganic chemicals. If the contaminant is classifed as a Group A or B carcinogen, according to the Agency's classification scheme of carcinogenic potential (U.S. EPA, 1986), then caution should be exercised in assessing the risks associated with lifetime exposure to this chemical.

In the absence of suitable ingestion toxicological data to derive a Lifetime HA, an inhalation study in mice is considered for a Lifetime HA.

McNutt et al. (1975) exposed male mice continuously via inhalation to 1,1,1-TCA at 250 (1,365 mg/m^3) or 1,000 ppm (5,460 mg/m^3) for 14 weeks. Control mice were exposed to room air. Serial sacrifice of exposed and control mice from 1 to 14 weeks demonstrated significant changes in the centrilobular hepatocytes of animals in the 1,000 ppm (5,460 mg/m^3) group. These changes consisted of vesiculation of the rough endoplasmic reticulum with loss of

attached polyribosomes, increased smooth endoplasmic reticulum, microbodies and triglyceride droplets. A NOAEL could not be identified but a LOAEL of 250 ppm (1,365 mg/m^3) from this study can be used with appropriate uncertainty factors. A Lifetime HA based upon these data is derived as follows:

Step 1: Determination of the Total Absorbed Dose (TAD)

$$TAD = \frac{(1{,}365\ mg/m^3)\ (1\ m^3/hr)\ (6\ hrs)\ (0.3)}{(70\ kg)} = 35\ mg/kg/day$$

where:

1,365 mg/m^3 (250 ppm) = LOAEL based on histological changes in liver of animals.

1 m^3/hr = ventilation volume for a 70 kg adult.

6 hrs = Exposure assumed to be saturable; thus, 6 hrs is considered equivalent to exposure for a 24-hour period.

0.30 = ratio of administered dose absorbed.

70 kg = assumed body weight of an adult.

Step 2: Determination of the Reference Dose (RfD)

$$RfD = \frac{(35\ mg/kg/day)}{(1{,}000)} = 0.035\ mg/kg/day$$

where:

35 mg/kg/day = TAD and LOAEL based on histological change in liver of animals

1,000 = uncertainty factor, chosen in accordance with NAS/ODW guidelines for use with a LOAEL from an animal study.

Step 3: Determination of the Drinking Water Equivalent Level (DWEL)

$$DWEL = \frac{(0.035\ mg/kg/day)\ (70\ kg)}{(2\ L/day)} = 1.0\ mg/L\ (1{,}000\ ug/L)$$

where:

0.035 mg/kg/day = RfD.

70 kg = assumed body weight of an adult.

2 L/day = assumed daily water consumption of an adult.

Step 4: Determination of the Lifetime Health Advisory

Lifetime HA = 1 mg/L x 0.20 = 200 ug/L

where:

1 mg/L = DWEL.

0.20 = assumed relative source contribution from water.

Evaluation of Carcinogenic Potential

- IARC (1982) has classified 1,1,1-trichloroethane in Group 3: Inadequate data to evaluate.

- Applying the criteria described in EPA's guidelines for assessment of carcinogenic risk (U.S. EPA, 1986), 1,1,1-trichloroethane is classified in Group D: Not classified (inadequate aniaml evidence of carcinogenicity).

VI. OTHER CRITERIA, GUIDANCE AND STANDARDS

- NAS (1980) has calculated a chronic SNARL of 3.8 mg/L for an adult consuming 2 liters of water and contribution from water being 20%.

- An ambient water quality criterion of 18.7 mg/L was calculated for an adult consuming 2 liters of water daily (U.S. EPA, 1980).

VII. ANALYTICAL METHODS

- Analysis of 1,1,1-trichloroethane is by a purge-and-trap gas chromatographic procedure used for the determination of volatile organohalides in drinking water (U.S. EPA, 1985a). This method calls for the bubbling of an inert gas through the sample and trapping 1,1,1-trichloroethane on an adsorbant material. The adsorbant material is heated to drive off the 1,1,1-trichloroethane onto a gas chromatographic column. This method is applicable to the measurement of 1,1,1-trichloroethane over a concentration range of 0.03 to 1500 ug/L. Confirmatory analysis for 1,1,1-trichloroethane is by mass spectrometry (U.S. EPA 1985b). The detection limit for confirmation by mass spectrometry is 0.3 ug/L.

VIII. TREATMENT TECHNOLOGIES

- Treatment technologies which will remove 1,1,1-trichloroethane from water include granular activated carbon (GAC) adsorption, aeration and boiling.

- Dobbs and Cohen (1980) developed adsorption isotherms for several organic chemicals including 1,1,1-TCA. It was reported that

Filtrasorb® 300 carbon exhibited adsorption capacities of 1.1 mg and 0.5 mg 1,1,1-TCA/gm carbon at equilibrium concentrations of 100 and 10 ug/L, respectively. U.S. EPA installed pilot-scale adsorption columns in Connecticut and New Jersey. In Connecticut, contaminated well water with 1,1,1-TCA concentrations ranging from 10 to 50 ug/L was passed through a Filtrasorb® 400 GAC column. Breakthrough occurred after 11,360 bed volumes (BV) or approximately 12 weeks of continuous operation. In New Jersey, contaminated groundwater with an average of 300 ug/L of 1,1,1-TCA was passed over a Witcarb® 950 GAC column. Breakthrough occurred after 16,800 bed volumes (BV) or approximately 30 weeks of continuous operation. A similar study assessed the effects of differing contact time and carbon adsorption of 1,1,1-TCA (Love and Eilers, 1982). It was reported that 1,1,1-TCE concentrations of 100 ug/L were reduced to 0.5 ug/L when loadings of 0.26 mg, 0.51 mg and 0.74 mg 1,1,1-TCA/gm of Filtrasorb® 400 carbon for contact times of 7.5, 15 and 22.5 minutes, respectively, were used.

- 1,1,1-TCA is amenable to aeration on the basis of its Henry's Law Constant of 400 atm (Kavanaugh and Trusell, 1980). In a pilot-scale diffused aeration column, removal efficiency of 90% of 1,1,1-TCA was achieved from an initial concentration of 237 ug/L at an air-to-water ratio of 4:1 (Love and Eilers, 1982). In a pilot-scale packed tower aeration study, removal efficiencies of 74-97% were achieved for 42-110 ug/L 1,1,1-TCA for a broad spectrum of operating parameters (Love and Eilers, 1982).

- Boiling also is effective for removing 1,1,1-TCA from water on a short-term, emergency basis. Studies have shown that 5 minutes of vigorous boiling will remove 96% of 1,1,1-TCA originally present (Love and Eilers, 1982).

- Air stripping is an effective, simple and relatively inexpensive process for removing 1,1,1-TCA and other volatile organics from water. However, use of this process then transfers the contaminant directly to the air stream. When considering use of air stripping as a treatment process, it is suggested that careful consideration be given to the overall environmental occurrence, fate, route of exposure and various other hazards associated with the chemical.

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- TETRACHLOROETHYLENE -
CHEMICAL INFORMATION SHEET*

WHAT IS TETRACHLOROETHYLENE?

Tetrachloroethylene (perchloroethylene; PCE; perc; tetrachloroethene) is a nonflammable, volatile, colorless liquid having a chloroform-like or ether-like odor. It is widely used as a dry cleaning agent, and is also extensively used as a solvent for metal degreasing in a variety of industries, such as metal and machine shops and automotive repair shops. Other uses of PCE include: solvent in textile manufacturing; starting material or intermediate in the production of other chemicals, especially Freon F-113; component of various types of home fabric and metal cleaners, spot removers, and paint removers; heat transfer fluid; and component of certain automobile care products such as brake cleaners, silicone lubricants, belt lubricants, ignition wire driers, and engine cleaners. Past uses of PCE included medical use in the treatment of hookworm and other infestations, as a vegetable fumigant, and as a component of certain aerosols and shoe polishes.

Total United States production of PCE for 1986 amounted to approximately 414 million pounds, of which over 50% was used in the dry cleaning and textile manufacturing industries. Production has been declining in recent years, due in part to decreased demand in the dry cleaning industry and increased efficiency and recycling among most users.

HOW DOES PCE GET INTO THE ENVIRONMENT?

There are no known natural sources of PCE. Its main route of entry into the environment is from evaporation during dry cleaning and degreasing uses. Less significant releases to the environment (but potentially important locally) include: evaporation and leaching from disposal sites; emissions from production sites and from its use in the production of other chemicals; evaporation from textile manufacturing processes; and evaporation from the many household products in which PCE is a component. Since the greatest amount of PCE released to the environment is from dry cleaning and industrial sources, its ambient air concentration is generally higher in urban areas than rural. These "background" concentrations generally range from parts per trillion (ppt) to low parts per billion (ppb) levels. Occupational exposures (and occasionally environmental levels close to emission sources) can occur at the parts per million (ppm) level. PCE has also been detected in raw and finished public water supplies, surface waters, groundwater, and in soils and sediments, usually as a result of leaching, spills, leaks, etc. from sites where PCE is used or disposed. Rarely, residues of PCE have been found in food items and aquatic organisms.

Typically, PCE will evaporate to the atmosphere and be broken down by sunlight and reactive atmospheric gases such as ozone. Thus, it is not expected to persist in soils, sediments, or surface waters which are "open" to the atmosphere. However, if PCE becomes confined in a part of the environment where evaporation is hindered or impossible, such as in deeper soils or sediments or in groundwater, it may persist for long periods of time.

WHAT ARE THE HEALTH EFFECTS ASSOCIATED WITH PCE EXPOSURE?

Short-term exposure -- The acute effects of PCE on humans have been documented from accidental or occupational exposures, often to very high inhaled or ingested levels of PCE. A variety of symptoms have been reported, chief among them being effects on the central nervous system (CNS), liver, and kidneys. CNS effects include dizziness, headache, nausea, impaired mental and physical function, sleepiness, and in severe cases coma and death. Minor CNS effects are expected at air concentrations around 100 ppm, whereas levels in air

necessary to produce severe effects such as unconsciousness are in the range of thousands of ppm. Minor CNS effects from ingestion (drinking) of PCE are expected at around 60 ppm.

The effects on liver and kidney function are delayed, occurring sometime after exposure to high concentrations of PCE. Other organs or tissues which have been reported to be affected by short-term exposure to PCE in air include the respiratory system, eyes, skin, and heart. Vapor concentrations greater than 200 ppm cause irritation of the eyes, nose, and throat. Direct skin contact for 5 to 10 minutes has been shown to cause mild to moderate burning sensations, redness, and blistering. In almost all cases, the short-term effects of PCE exposure are reversible.

Long-term exposure -- Information on the long-term effects of PCE exposure comes mainly from occupational studies. Because of the ways PCE is used in industry, workers are usually exposed to other chemicals as well. Often, these studies have not compared workers to unexposed controls. Furthermore, the length and amount of exposure is rarely known to the degree necessary to associate exposure levels with symptoms. Therefore, there is a degree of uncertainty associated with some of the reported long-term health effects of PCE.

Most studies have found that many of the temporary effects reported in short-term, higher level exposures are also seen in long-term, lower level exposures, but on a more continuous or permanent basis. Frequent dizziness, headaches, and nausea; fatigue; and disorientation have been reported to occur long after exposure has ceased. Other CNS symptoms not seen following short-term, high level exposures have also been documented following long-term, lower level exposures, such as deficits in short-term memory, incoordination of muscles, irritability, and sleep disturbances. Furthermore, these symptoms may be irreversible in some individuals. It is much less certain whether the effects on liver, kidneys, heart, and respiratory system seen after high level exposures are also experienced as a result of long-term lower level exposures. From the available data, it appears that long-term, noncancer health effects are not seen at levels below 100 ppm in air. Data concerning ingestion exposures in humans are even more limited. Results from animal studies indicate that daily intake of 14 mg/kg (ppm) PCE causes no adverse noncancer health effects. Using a 1000-fold safety factor, the estimated no-effect level in humans is 0.014 mg/kg/day (ppm).

The cancer-causing potential of PCE has been examined in several animal studies. It has been shown to cause leukemia in rats and liver tumors in mice. The majority of studies examining the mutation-causing ability of PCE have found it to be non-mutagenic, or at most, weakly mutagenic. Several epidemiological studies of workers exposed to PCE (and other industrial chemicals) provide inconclusive evidence regarding the carcinogenicity of PCE in humans. Based on these findings, USEPA considers the evidence sufficient to rank PCE as a probable human carcinogen. However, USEPA's independent review board, the Science Advisory Board, at this time disputes some of the findings, ranking PCE as a possible human carcinogen.

HOW IS PCE REGULATED?

Threshold Limit Values (TLV) adopted by the American Conference of Governmental Industrial Hygienists refer to airborne concentrations of substances and represent conditions under which it is believed that nearly all healthy workers may be repeatedly exposed without adverse effect. The TLV for PCE is 50 ppm as an average eight-hour exposure limit for a five-day work week. The non-enforceable Ambient Water Quality Criterion, established by USEPA under the Clean Water Act, is 0.8 ug/l (ppb) for surface waters, based on the risk to human health from consumption of contaminated water and fish. PCE is a hazardous waste under the Resource Conservation and Recovery Act, and its disposal is therefore regulated by this Act.

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*Note: This information sheet is a summary of readily available data regarding the general nature and effects of this chemical. The reader is encouraged to consult other sources or an appropriate professional if a more detailed explanation for specific concerns is desired.

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APPENDIX I

Illinois
Environmental
Protection Agency

Office of Chemical Safety
2200 Churchill Road, P.O. Box 19276
Springfield, Illinois 62794-9276

IEPA/ENV/87-001-6 April, 1987

- GLOSSARY -
CHEMICAL INFORMATION SHEET

absorption - the movement of a chemical into the bloodstream or other body fluid or tissue after its entrance into the body through the skin, lungs, or gastrointestinal tract.

acute - sharp, severe; having a relatively rapid onset, often with severe symptoms and a relatively short course. In toxicology refers to a single large exposure to a chemical (acute exposure), or to the development of symptoms of poisoning soon after a single exposure to a substance (acute toxicity).

ACGIH - the American Conference of Governmental Industrial Hygienists. It recommends upper limits (see TLV) for exposure to workplace chemicals.

bioconcentration - the process in and by which chemical substances are accumulated in living organisms above their concentration in the environment. For example, a chemical is spilled into a river or lake and is ingested and stored by small organisms like plankton; small fish eat the plankton; and large fish eat the smaller fish. As this process occurs, the chemical becomes thousands of times more concentrated in the tissues of the large fish than in the plankton or the water. Usually occurs with fat-soluble compounds rather than water-soluble compounds.

biodegradation - the breaking down of an organic substance, resulting from the complex action of living organisms.

cancer - a group of diseases characterized by malignant, uncontrolled growth of cells of body tissue (tumors).

carcinogen - a term applied generally to any substance that is capable of producing cancer or increasing the growth and spreading of tumors in an organism.

chronic - occurring over a period of time. In toxicology refers to repeated exposure (chronic exposure) to a chemical for a relatively long period of time or persistence of symptoms or disease over a long period of time (chronic toxicity).

epidemiology - the study of the incidence, distribution, and control of disease in human populations.

leaching - downward movement of a material in solution through soil.

Maximum Contaminant Level (MCL) - the maximum permissible level of a contaminant that is allowed in a public water supply system.

metabolism - the changes that a chemical undergoes in an organism. The products of metabolism may be more or less active in the organism than the original (parent) compound. In animals, many of these products find their way to body excretions, for example through lung exhalation, urine, or feces. Tracing the pathways of metabolism is important to shed light on possible relationships between chemicals and particular health effects.

mg/m^3 - means milligrams of a chemical in a cubic meter of air. It is a density measurement expressing the amount of air pollutant in a given volume of air.

mutagen - a substance that causes a change in the genetic material in a body cell, called a mutation. Mutations may lead to birth defects, miscarriages, or cancer, or they may have no obvious effect, depending on what genetic material is damaged and on where the damage occurs.

persistent - existing for a long time in the environment or the body. For chemicals, this means not easily broken down; for the effects of chemicals, this means the effect remains or recurs long after exposure to the chemical.

pesticide - a general term used to describe a product designed to kill or control unwanted organisms; for example, herbicides are designed to control unwanted plants, insecticides are designed to control unwanted insects, fungicides are designed to control fungus and mold, etc.

ppb - an expression describing a small concentration, equal to an amount of one substance in a billion parts of another material; for example, one drop of alcohol in 16,000 gallons of water.

ppm - an expression describing a small concentration, equal to an amount of one substance in a million parts of another material; for example, one drop of alcohol in 16 gallons of water.

solvent - a liquid substance capable of dissolving or dispersing one or more other substances.

teratogen - a substance that causes stillbirths, birth defects, or malformations by affecting the growing fetus.

TLV - is the Threshold Limit Value for air. The TLV is a workplace exposure limit recommended by ACGIH and represents conditions under which it is believed that nearly all workers may be repeatedly exposed to a substance day after day without adverse effect.

toxicology - the study of the adverse effects of chemicals on living organisms.

volatile - readily vaporizable at a relatively low temperature.

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