
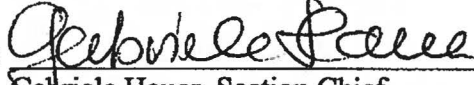


**Signature Page**  
**For**  
**Kokomo Garrison & Main Water Treatment Wellfield**  
**Preliminary Assessment Report**  
**Kokomo, Indiana**  
**Howard County**

Prepared By:  Date: 12/17/10  
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Site Investigation Section  
Indiana Department of Environmental Management

Approved By:  Date: 12/19/10  
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Approved By:  Date: 8/31/11  
EPA Site Assessment Manager  
U.S. EPA Region V



## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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December 29, 2010

Mr. Pat Hamblin, SR-6J  
U.S. EPA Region V  
77 West Jackson Boulevard  
Chicago, IL 60604-3507

Dear Mr. Hamblin:

Re: Kokomo Garrison & Main  
Water Treatment Wellfield  
Kokomo, Howard County  
Preliminary Assessment

### SITE SUMMARY

The Indiana Department of Environmental Management (IDEM) under a cooperative agreement with the U.S. EPA conducted a Preliminary Assessment (PA) of the Kokomo Garrison & Main Water Treatment Wellfield ("Kokomo Wellfield") site to determine if the site warrants further investigation under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, a.k.a. Superfund).

The Kokomo Wellfield supplies a portion of the water for the municipality of Kokomo (population of approximately 57,275). The Kokomo Wellfield consists of eleven (11) wells located on the eastern edge of the city, on either side of Wildcat Creek.

The IDEM Office of Water Quality's Drinking Water Branch notified the Site Investigation Program of levels of vinyl chloride and arsenic detected in Kokomo's unfinished water. In September 2007, Kokomo sampled the unfinished water and reported that vinyl chloride was detected in five (5) wells at levels between 0.8 ppb and 5.5 ppb (the MCL is 2.0 ppb). Additionally, arsenic was detected in four (4) wells at levels between 41 ppb and 890 ppb (the MCL is 10 ppb). Subsequent raw water samples have confirmed the continued presence of both contaminants. A nearby facility that has entered the IDEM Voluntary Remediation Program has admitted responsibility for the arsenic contamination and is currently providing treatment for the city to remove the arsenic from the finished water supply. The source of the vinyl chloride is unknown.

**PRELIMINARY ASSESSMENT REPORT**

for

**KOKOMO GARRISON & MAIN WATER TREATMENT WELLFIELD  
KOKOMO, INDIANA  
INN000510479**

PREPARED BY:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF LAND QUALITY  
SITE INVESTIGATION SECTION

December 29, 2010

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## **SECTION 1.0 INTRODUCTION**

The Indiana Department of Environmental Management (IDEM), Office of Land Quality (OLQ), Site Investigation Section, under a Cooperative Agreement (CA) with the United States Environmental Protection Agency (U.S. EPA), Region V Office, has been funded to perform Preliminary Assessments (PA) at certain sites listed in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, commonly known as Superfund, and the Superfund Amendments and Reauthorization Act (SARA) of 1986.

The primary objectives of the PA are:

- to collect readily available information and conduct a site and environmental reconnaissance;
- to distinguish between sites that pose little or no risk to human health and the environment and sites that require further investigation; and
- to identify sites after requiring assessment for possible emergency response actions.

The Site Investigation Section was given approval by the U.S. EPA to conduct a PA at the Indiana-American Water Company (INAWC) Kokomo Garrison & Main Water Treatment Wellfield site located in the City of Kokomo, in Howard County, Indiana based on the results of a Pre-CERCLIS Screening (PCS) that was conducted at the site (January 22, 2010).

Information contained in this report will be used to evaluate this site to support a site decision regarding the need for further Superfund action, including the possibility for the Kokomo Garrison & Main Water Treatment Wellfield site to be considered for inclusion on the National Priorities List (NPL) of hazardous waste sites.

## **SECTION 2.0 SITE BACKGROUND**

The Kokomo Garrison & Main Water Treatment Wellfield is located in the City of Kokomo, in Howard County, Indiana. Based on raw water samples collected by the INAWC and submitted to the IDEM OWQ Drinking Water Branch as part of its wellhead protection plan, it has been determined that five (5) of the city's drinking water wells (B, C, 18, 19, and 20) have been contaminated by vinyl chloride. Wells C and 19 had levels of vinyl chloride exceeding the MCL. Additionally, four (4) of the city's wells (B, C, 18, and 19) have been contaminated by arsenic at levels exceeding the MCL.

Arsenic is a naturally-occurring element that can occur in both organic and inorganic forms. Arsenic has several major industrial uses as an essential component of pesticides and herbicides, lead batteries, metal alloys, semiconductors, wood preservatives and glass manufacturing. Ingesting arsenic in low levels can cause nausea, vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, “pins and needles” sensation to hands and feet, and at very high levels can result in death. Ingesting arsenic at low levels for a very long time can cause a darkening of the skin and the appearance of small corns or warts on the palms, soles and torso. Studies have shown that ingesting arsenic can increase the risk of skin cancer and cancer in the liver, bladder and lungs.

Vinyl chloride is a colorless gas that burns easily and is unstable at high temperatures. It is a manufactured substance with a mild sweet odor. It is formed during the break down of other organic compounds such as trichloroethylene, tetrachloroethylene and trichloroethane. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products. While the effects of drinking high levels of vinyl chloride are unknown, breathing high levels of vinyl chloride can cause dizziness and sleepiness, and in very high levels can cause unconsciousness and even death. Long-term exposure can lead to nerve damage and immune problems. Vinyl chloride is a known carcinogen.

### **Section 2.1 Site Description**

The Kokomo Garrison & Main Water Treatment Wellfield provides potable drinking water to the City of Kokomo (population served = 57,275). The wellfield is comprised of eleven (11) production wells (well #'s B, C, D, E, F, G1, G2, 18, 19, 20 and 21) in the general vicinity of the intersection of U.S. 31 and Carter Street. The latitude and longitude for the site are 40°29'1.79"N and 86°6'27.05"W (generated utilizing ARC GIS Version 9.2 and aerial photography flown 2005 for the Indiana Department of Homeland Security). Three other wellfields (Phillips Street Wellfield, Peat Bogs Wellfield and Indian Heights Wellfield [offline]) are also owned and operated by the INAWC - Kokomo. Additionally, drinking water is obtained from two (2) surface water sources (Wildcat Creek and Wildcat Reservoir). The contaminants have not been detected in the other wellfields; therefore, these wellfields are not a part of this investigation. Arsenic has been detected at elevated levels in Wildcat Creek and has been addressed in a separate investigation. According to INAWC – Kokomo representatives, drinking water from the

Kokomo Garrison & Main Water Treatment Wellfield can potentially serve approximately 85% of the Kokomo population. The Kokomo Garrison & Main Water Treatment Wellfield is in a mixed residential/commercial/ industrial area of Kokomo just southeast of the downtown area. The INAWC – Kokomo Phase II Wellhead Protection Plan identifies several potential sources of contamination in the area (see Appendix H).

### **Section 2.2 Site History**

According to raw water sample results taken from the municipal wells and submitted by the INAWC - Kokomo to IDEM, vinyl chloride has been detected at levels exceeding the MCL (2.0 ppb) in two (2) of the wells. Arsenic has also been detected in raw water at levels exceeding the MCL (10 ppb) in four (4) of the wells. OmniSource Corp./Mervis, Inc. (OmniSource) currently owns property near the wellfield that was formerly owned and operated by Pittsburgh Plate Glass (PPG), and has entered that property into the IDEM Voluntary Remediation Program (VRP). The former PPG property has been shown to be contaminated with arsenic and is at least partially responsible for the arsenic contamination in the wellfield. OmniSource is currently supplying the City of Kokomo with treatment equipment to remove the arsenic prior to the water entering the City's finished water supply.

## **SECTION 3.0 FIELD INVESTIGATION ACTIVITIES**

### **Section 3.1 Field Inspection**

Though a dedicated field investigation has not been undertaken by SI staff, a previous limited sampling event (utilizing state funds) was conducted by SI staff in May 2008 to determine if any residential wells in the area of the contaminated municipal wells were impacted by vinyl chloride. On November 22, 2010, IDEM staff (Mssrs. Dan Chesterson and Tim Johnson) met in Kokomo with INAWC Water Quality Supervisor, Mr. Kirk Kuroiwa, and Operations Supervisor – Production, Mr. Ryan Smith. IDEM staff also drove the area in the vicinity of the wellfield to look for potential sources of contamination. Program staff are also familiar with the area due to other program sites in the immediate vicinity (Wildcat Creek Sediment Site [INSFN0507812], Kokomo Creek Sediment Site [INSFN0507813], and the Omnisource Site [VRP# 6080301]). Additional information regarding this site was collected from IDEM files, aerial photographs and maps.

### **Section 3.2 Analytical Data**

Analytical data was submitted by the INAWC - Kokomo to the IDEM Office of Water Quality's Drinking Water Branch. This data is attached and indicates that vinyl chloride and arsenic have been detected in the system's raw water. Vinyl chloride has been detected in the Garrison & Main Water Treatment Wellfield wells B, C, 18, 19, 20, and 21. Detections in wells C, 18, 19 and 20 have exceeded the MCL of 2.0 ppb. Detections in wells B and 21 have not exceeded the MCL. To date the finished water has not had any detections of vinyl chloride above the MCL. Arsenic has been detected in the Garrison & Main Water Treatment Wellfield wells B, C, 18 and 19 at levels exceeding the MCL of 10.0 ppb (see Appendix B).

### **Section 3.3 Past Environmental Investigations**

In May 2008, staff from the IDEM SI program collected water samples from seven (7) residences with private wells in the vicinity of the Kokomo Garrison & Main Water Treatment Wellfield to determine if they had been impacted by vinyl chloride. Analytical data from this investigation indicated that the vinyl chloride had not migrated to the residential wells at this time.

Wildcat Creek, which flows near the Kokomo Garrison & Main Water Treatment Wellfield, was previously investigated by the IDEM SI program in 2000 and found to be contaminated with polychlorinated biphenyls (PCBs) and arsenic. An Integrated Assessment (September 2000) and an Expanded Site Inspection (September 2001) were conducted by the SI program for the Wildcat Creek Sediment Site. The Wildcat Creek Sediment Site is still an active CERCLA investigation.

## **SECTION 4.0 MIGRATION PATHWAYS**

### **Section 4.1 Ground Water**

Ground water is the primary focus of this investigation. Ground water samples have not been taken by IDEM as part of this PA investigation. However, raw water sample results from the City of Kokomo's municipal wells were provided to IDEM by the INAWC - Kokomo. Ground water has been impacted by vinyl chloride and arsenic at levels that exceed the MCL in the municipal well's raw water. These contaminants have been detected in the INAWC - Kokomo's Garrison & Main Water Treatment Wellfield wells that supply drinking water to approximately 57,275 residents.

## **Section 4.2 Surface Water**

No surface water samples were taken as part of this PA investigation. The nearest surface water body is Wildcat Creek which runs south/southwest through the Kokomo Garrison & Main Water Treatment Wellfield. It has been documented in a previous investigation that the sediment in Wildcat Creek is contaminated by PCBs and arsenic. It is not known if the creek has been impacted by the vinyl chloride. The INAWC – Kokomo utilizes a surface water intake (Wildcat Creek) located within the Kokomo Garrison & Main Water Treatment Wellfield area.

### **Section 4.2.1 Drinking Water Threat**

The City of Kokomo utilizes ground water from three wellfields and surface water from two (2) sources to serve 57,275 residents. Several wells in the Kokomo Garrison & Main Water Treatment Wellfield are contaminated with vinyl chloride and arsenic. One of the surface water intakes (Wildcat Creek) is located within the Kokomo Garrison & Main Water Treatment Wellfield area. Wildcat Creek has previously been known to have been contaminated with PCBs and arsenic.

The ground water and the surface water sources are blended and treated (for arsenic) at the Kokomo Garrison & Main Water Treatment facility. This treatment process currently eliminates the contaminants from the finished water supply. The treatment process is a Tricon Ground Water Filtering System that consists of aeration, the addition of ferric chloride, potassium permanganate, chlorine and a cationic polymer, followed by a clarification process and anthracite filtration. Although designed specifically for the removal of arsenic from the drinking water, the process has also been successful in eliminating vinyl chloride below detection limits.

### **Section 4.2.2 Human Food Chain Threat**

The human food chain threat category specifically targets fisheries potentially affected by the migration of contaminants from the site. The primary fishery within the 15-mile surface water pathway from the site is Wildcat Creek which runs through the wellhead protection area and is immediately adjacent to or very near most of the wells in the wellfield.

The principal uses of Wildcat Creek, other than for drinking water, are fishing and recreation. Wildcat Creek is considered a fishery since food chain species (fish) are known to be taken for human consumption. A July 1, 2010 Kokomo Tribune newspaper article indicates that fishing is common along the contaminated stretch of Wildcat Creek and that these fish are frequently

consumed (see Appendix G). The population potentially affected by contaminants migrating off-site would include persons who use the river for recreational purposes, such as fishing and swimming. Wildcat Creek, downstream of the water works dam, is listed in the 2010 Indiana Fish Consumption Advisory as a Group 5 waterway (No Consumption - Do Not Eat) for contamination.

#### **Section 4.2.3 Environmental Threat**

The Indiana Department of Natural Resources (IDNR) was contacted to determine if there were any significant natural features or endangered, threatened, and rare species located in the vicinity of the site. According to the IDNR, there are there are two (2) special interest items identified in the study area: the Butler's Garter Snake, a reptile listed as endangered on the state endangered, threatened and rare species list; and the American Manna-grass, a plant listed as extirpated on the state endangered, threatened and rare species list. The details can be found in Appendix F.

#### **Section 4.3 Soil Exposure**

No soil samples were collected as part of this PA investigation. The site is in a mixed-use area (residential, commercial/industrial), providing potential targets in the event of an off-site release of hazardous materials. Soil samples were previously obtained in the vicinity during the Wildcat Creek Sediment Site investigations (September 2000 and September 2001) and determined to be contaminated with arsenic and PCBs.

#### **Section 4.4 Air Route**

No air samples were collected as part of this PA investigation, nor were observed release criteria met for this pathway. No confirmed air release has been documented.

### **SECTION 5.0 SUMMARY AND CONCLUSIONS**

The City of Kokomo's drinking water wells have been impacted by vinyl chloride and arsenic that exceed the MCL in the wellfield's raw water. At least a portion of the arsenic source has previously been established. However, the source of the vinyl chloride is unknown. The City's drinking water is currently being treated to eliminate the contaminants from the finished water supply.

## **SECTION 6.0 REFERENCES**

- IDEM Drinking Water Branch website: <https://myweb.in.gov/IDEM/DWW/>
- Indiana-American Water Company, Inc. – Kokomo Operations, Phase I Wellhead Protection Management Plan, January 2002.
- Indiana-American Water Company – Kokomo Phase II Wellhead Protection Plan
- Remediation Work Plan – PPG Industries, Inc. Kokomo Indiana Site, VRP Site No. 6951202, January 2006; prepared by MFG, Inc.
- Interview with Indiana-American Water Company – Kokomo representatives, Mr. Kirk Kuroiwa and Mr. Ryan Smith, November 22, 2010.
- Telephone and email correspondences with Mr. Jeff Robinson and Mr. Kirk Kuroiwa, Indiana-American Water Company – Kokomo.
- Kokomo Tribune newspaper article, Mike Fletcher, July 1, 2010.
- Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs, <http://www.atsdr.cdc.gov/toxfaqs/index.asp> .

# **Appendix A**

**Figure 1 – Site Location Topographic Map**

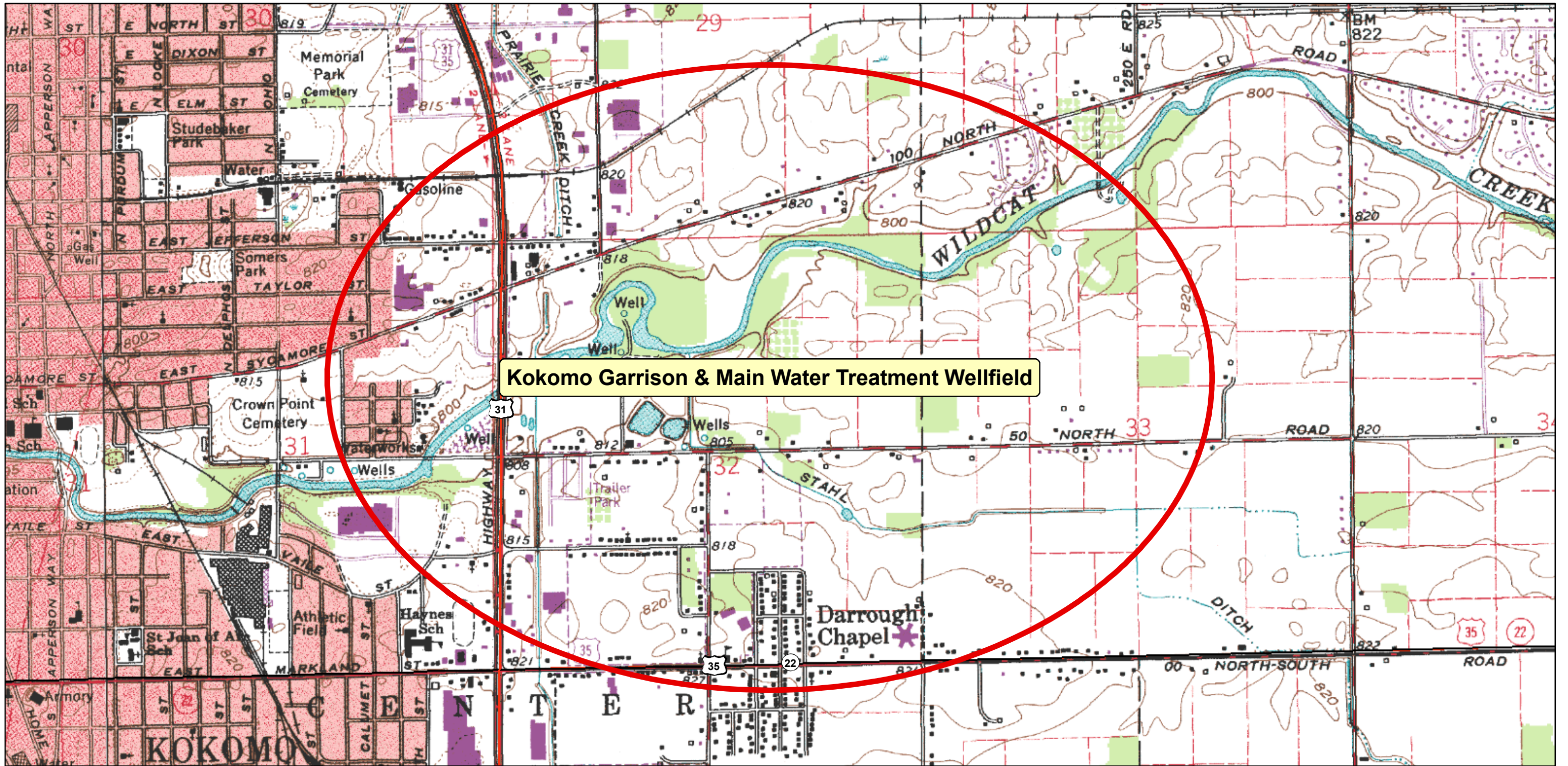
**Figure 2 – Site Location Aerial Photograph**

**Figure 3 – Wellhead Protection Area  
(\*\*Confidential Information\*\*)**

**Figure 4 – 15- Mile Surface Water Pathway Map**

**Figure 5 – 4-Mile Radius Map**

# Kokomo Garrison & Main Water Treatment Wellfield Site Location Topographic Map

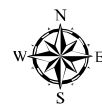
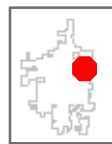


Sources:  
**Non Orthophotography Data** - Obtained from the State of Indiana Geographic Information Office Library  
**Topographic Map** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

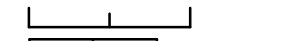
Howard Co.



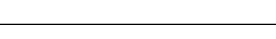
Site location in City of Kokomo



0 1,000 Feet



0 240 Meters



This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

**Mapped By:** Lorraine Wright, Office of Land Quality  
**Date:** January 12, 2010

 Kokomo Garrison & Main Water Treatment Wellfield

# Kokomo Garrison & Main Water Treatment Wellfield Site Location Aerial Map

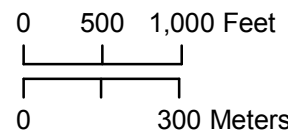
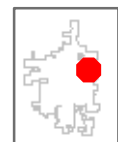



**Sources:**  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography**- Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

Howard Co.



Site location in  
City of Kokomo



 General Site Location

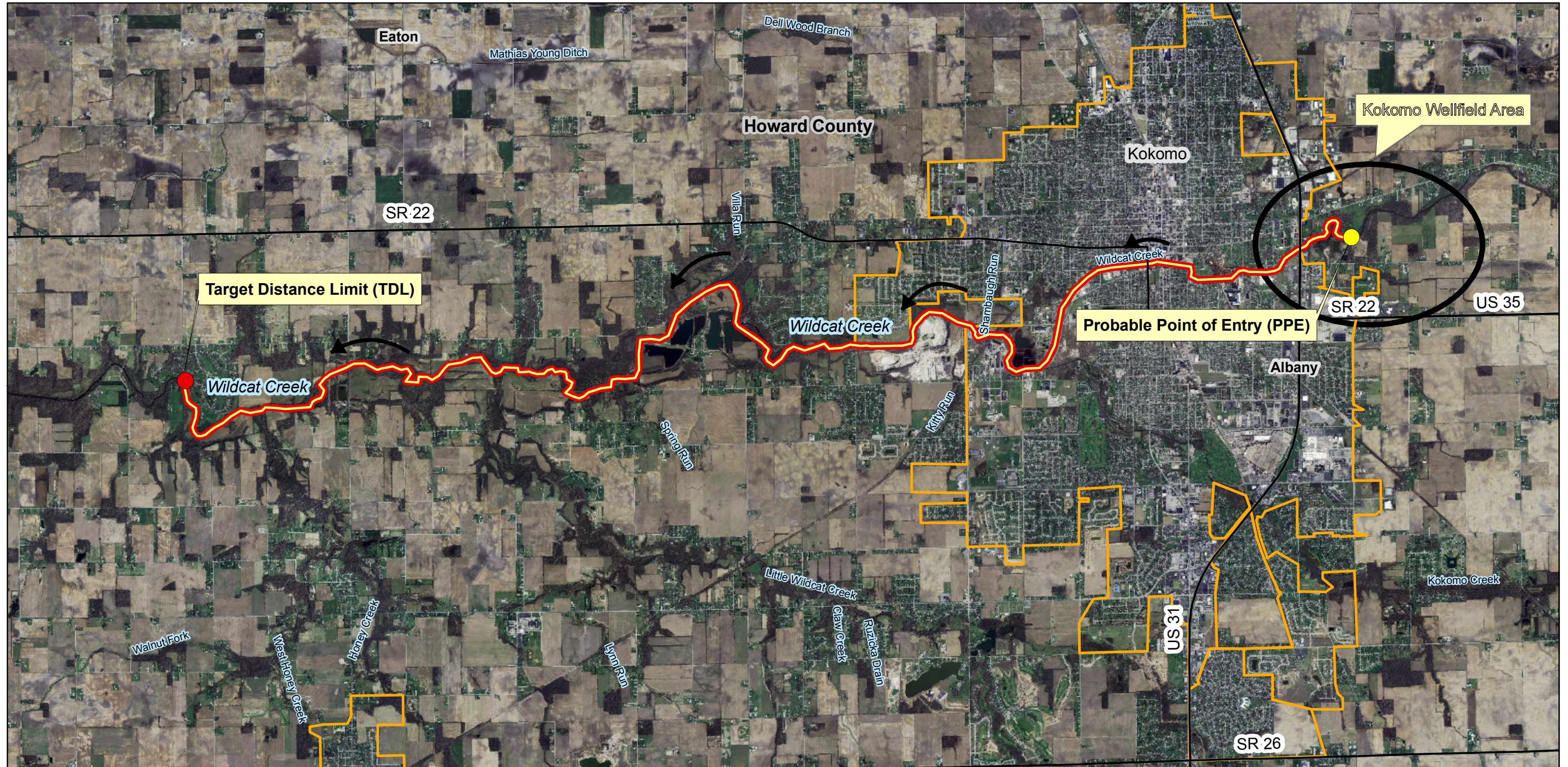


This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

**Mapped By:** Lorraine Wright,  
Office of Land Quality  
**Date:** December 7, 2009

**Wellhead Protection Area Maps are not-for-public-view documents and have been redacted from this document.**

# 15 Mile Surface Water Pathway Aerial Map - Kokomo Garrison & Main Water Treatment Wellfield, Kokomo, Howard Co., IN

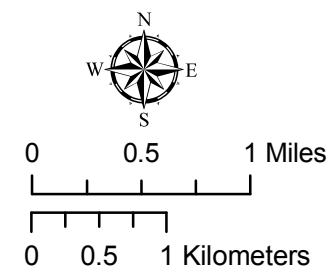
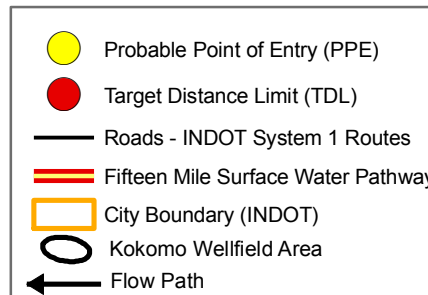


Sources:  
 USGS Digital Raster Graphics 1:24,000 topographic map  
 National Hydrography Dataset (NHD)  
 INDOT System 1 Routes and City Boundaries  
 Digitized PPE, TDL, Surface Water Pathway, and Wellfield Area

Map Projection: UTM Zone 16N □ Map Datum: NAD83



Kokomo,  
Howard Co.



Mapped by: Lorraine Wright IDEM, Office of Land Quality,  
 Science Services Branch, Engineering & GIS Services,  
 Date: December 2, 2010

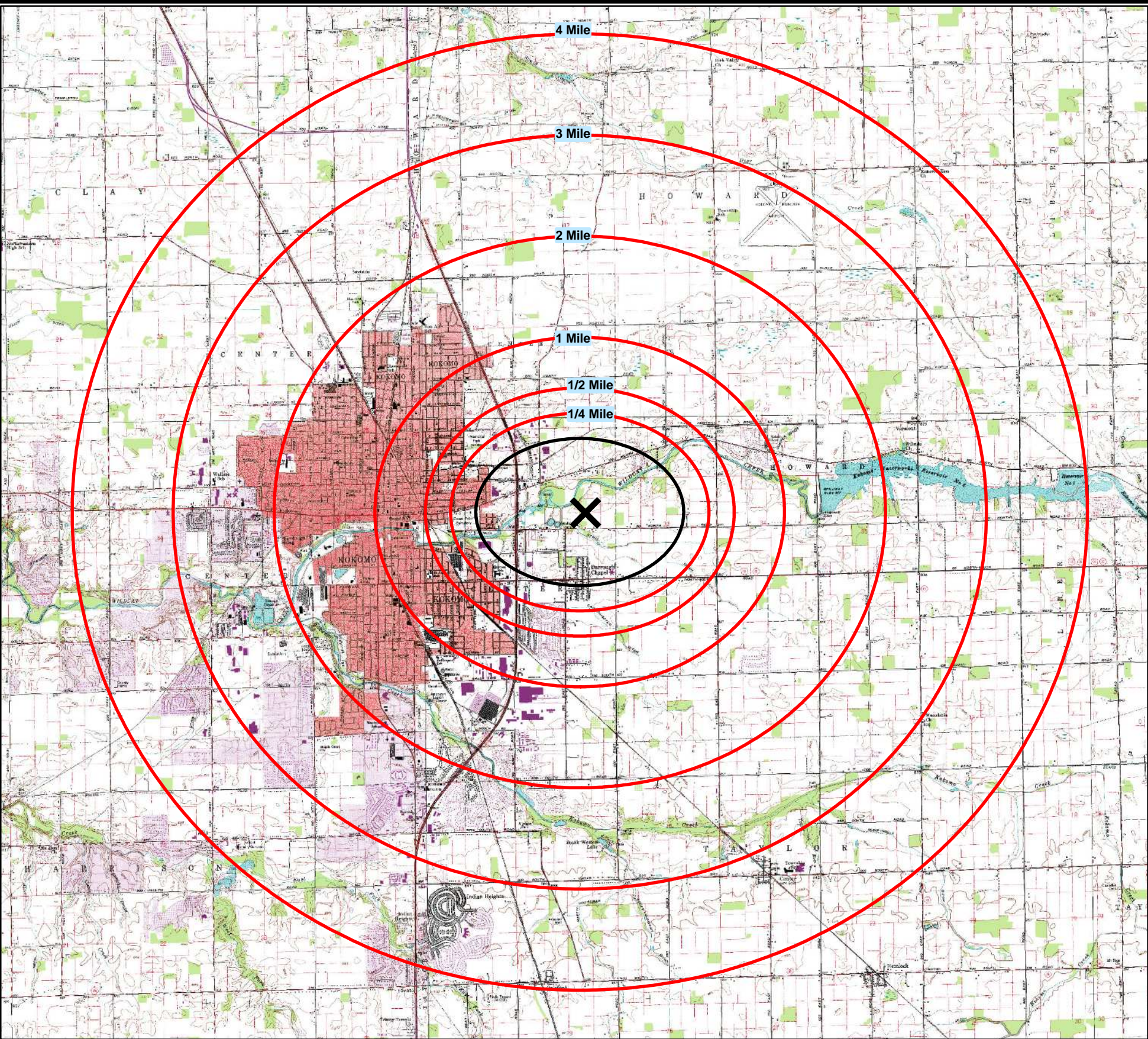
Disclaimer: This map is intended to serve as an aid in graphic  
 representation only. This information is not warranted for  
 accuracy or other purposes.

# Four Mile Radius Map, Kokomo Garrison Main Water Treatment Wellfield

Kokomo, Howard Co., IN  
 86°6'27.05"W 40°29'11.79"N  
 (Approximate Center of Site)

Buffer Distance	Adjusted Population
0 - 1/4 Mile	2530
1/4 - 1/2 Mile	1804
1/2 - 1 Mile	5335
1 - 2 Mile	15873
2 - 3 Mile	11288
3 - 4 Mile	10702
<b>Total Adjusted Population</b>	<b>47532*</b>

\* Indiana American Water Co. - Kokomo Report to IDEM - serviced population: 57,275



**Mapped by:** Lorraine Wright, IDEM, Office of Land Quality, Science Services Branch, Engineering & GIS Services **Date:** December 2, 2010

**Sources:**  
 IDEM 4 Mile Mapper Application  
 Indiana Geographic Information Officer (GIO) Data Library  
 USGS Digital Raster Graphics 1:24,000 topographic map  
 Census block group 2006 total population

**Disclaimer:** This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.  
 There are known sources of error in the population estimates presented on this map including:  
 -The Census 2006 block group population data is out of date, and is itself an imperfect estimate of population.  
 -The adjusted population estimate derived from the Census 2006 block group data assumes that the population is evenly distributed in each block group polygon.  
 -The Census 2006 block group population has been clipped to include Indiana data only.

**Method of Estimating Population:** The adjusted population estimate is the sum of Census 2006 block group populations. The adjusted population estimate (TOTPOP field) is adjusted to include only the areas of the block groups contained inside the buffers. The adjusted population estimate assumes that the population is evenly distributed in each block group polygon. The specific procedure used in this analysis is as follows:

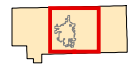
- The point for the center of the site is selected interactively by the user through the 4 Mile Mapper Polygon model.
- The user initiates the 4 Mile Mapper model to perform the rest of the multi-step analysis which is described in the following steps.
- The study area point or polygon is buffered at 1/4, 1/2, 1, 2, 3 and 4 miles.
- The original area of the census block polygons is calculated and stored.
- The buffers are used to clip the census block group polygons. This is a new area referred to as the shape area. The shape area has the attribute records associated with the original census block group polygon with the area of the new polygon area.
- The shape area of the census block polygons is divided by original area of the census block polygons to calculate the percent change.
- The percent change result is then multiplied by the population of the original census block to yield a calculated population for the new polygon. For example: Block Group A with an area of 10 square miles and a population of 200 people is split into 2 polygons by the 4 mile buffer ring. The area of the block group inside the 4 mile buffer is 2 square miles, or 20% of the area of the original 10 square mile block group. Assuming the population is uniformly distributed in Block Group A, the population from Block Group A that is within the 4 mile buffer ring should also be 20% of the total population for the block group. Twenty percent of 200 is 40 people. (2 ÷ 10 × 200 = 40)
- The newly calculated population statistics are associated in a database table that is converted into a layer file that is displayed in the Four Mile Radius Map. The new population figures from the layers (attribute tables) are then copied into a spreadsheet that subtracts the population figure from the previous buffer. This is done by taking the population for each buffer distance and subtracting the population of the next smaller buffer distance to provide a population figure for the donut area bounded by each pair of consecutive buffer distances (e.g. 0 to 1/4, 1/4 to 1/2, 1/2 to 1, 1 to 2...). An adjusted population table is labeled and pasted into the Four Mile Radius Map.

The main code that repeats over and over for the 4Mi\_Mapper model is: Buffer>Clip>Add Fields>Calculate Field>Dissolve

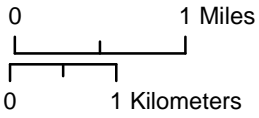
All models were developed by E.J. McNaughton, IDEM GIS Coordinator



Kokomo, Howard Co.



- Kokomo Wellfield (Approximate Center)
- Kokomo Wellfield (Approximate Area)
- Buffer Radius



# **Appendix B**

## **Analytical Data**

**Vinyl Chloride Data 2007 - 2010**

Reported in micrograms/Liter

	Well B	Well C	Well D	Well F	Well G1	Well G2	Well 15	Well 16
2010	ND	9.9	ND	ND	ND	ND	ND	ND
2009	ND	2.7	ND	ND	ND	ND	ND	ND
2008	ND	2.7	ND	ND	ND	ND	ND	ND
2007	0.8	4.8	ND	ND	ND	ND	ND	ND

	Well 17	Well 18	Well 19	Well 20	Well 21	Creek
2010	ND	4.3	1.5	ND	ND	ND
2009	ND	3.6	3.8	4.5	1.4	ND
2008	ND	ND	4.1	0.5	ND	ND
2007	ND	1.8	5.5	1.4	ND	ND

### Monthly Average Groundwater Influent Arsenic

Reported in micrograms/Liter

Jan-07	153
Feb-07	221
Mar-07	162
Apr-07	178
May-07	173
Jun-07	188
Jul-07	177
Aug-07	168
Sep-07	172
Oct-07	133
Nov-07	179
Dec-07	181
Jan-08	210
Feb-08	222
Mar-08	183
Apr-08	184
May-08	197
Jun-08	197
Jul-08	222
Aug-08	179
Sep-08	230
Oct-08	273
Nov-08	270
Dec-08	166
Jan-09	191
Feb-09	184
Mar-09	180
Apr-09	154
May-09	139
Jun-09	44
Jul-09	172
Aug-09	149
Sep-09	99
Oct-09	104
Nov-09	94
Dec-09	94
Jan-10	110
Feb-10	113
Mar-10	163
Apr-10	99
May-10	98
Jun-10	97
Jul-10	89
Aug-10	101
Sep-10	123
Oct-10	96

**Arsenic Data 2002-2006**  
milligrams/liter

	<b>Well 18</b>	<b>Well B</b>	<b>Well C</b>	<b>Well 19</b>	<b>Well 20</b>	<b>Well 21</b>
<b>2002</b>	0.914	0.114	0.208	0.619	0.004	0.002
<b>2006</b>	0.651	0.074	0.268	0.497	0.005	NA

WILDCAT CREEK

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WILDCAT CREEK	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:55	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *DWN*

Finalized By: Cheryl D. Norton, Laboratory Director *CDN*

2007		IN	A
		609	

07072355  
COC AND REPORT NUMBER

Starting Sample: CL56595  
Report Date: 09/28/07  
Page 1. of 2



WELL B

RAW

COLLECTED 09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL B	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:10	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

STYRENE

VINYL CHLORIDE

**No deviations from the method criteria were noted unless listed below.**

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007

07072351  
COC AND REPORT NUMBER

IN  
609

A

Starting Sample: CL56591  
Report Date: 09/28/07

## Report Details

Sample Number: CL56581

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time	
	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/24/07	22:51
BENZENE									
	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/24/07	22:51
CARBON TETRACHLORIDE									
	524.2R4.1		100	0.5	ND	ug/l	BC	09/24/07	22:51
CHLORO BENZENE (MONO)									
cis-1,2-DICHLOROETHYLENE		2972	70	0.5	ND	ug/l	BC	09/24/07	22:51
	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/24/07	22:51
1,2-DICHLORO BENZENE (ORTHO)									
	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/24/07	22:51
1,4-DICHLORO BENZENE (PARA)									
	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/24/07	22:51
1,2-DICHLOROETHANE									
	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/24/07	22:51
1,1-DICHLOROETHYLENE									
	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/24/07	22:51
1,2-DICHLOROPROPANE									
	524.2R4.1	2992	700	0.5	ND	ug/l	BC	09/24/07	22:51
ETHYLBENZENE									
	524.2R4.1		5	0.5	ND	ug/l	BC	09/24/07	22:51
DICHLOROMETHANE (METHYLENE CHLORIDE)									
	524.2R4.1	2996	100	0.5	0.6	ug/l	BC	09/24/07	22:51
STYRENE									
	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/24/07	22:51
TETRACHLOROETHYLENE (PCE)									
	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/24/07	22:51
TOLUENE									
	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/24/07	22:51
trans-1,2-DICHLOROETHYLENE									
	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/24/07	22:51
1,2,4-TRICHLORO BENZENE									
	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/24/07	22:51
1,1,1-TRICHLOROETHANE									
	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/24/07	22:51
1,1,2-TRICHLOROETHANE									
	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/24/07	22:51
TRICHLOROETHYLENE (TCE)									
	524.2R4.1	2976	2	0.5	0.8	ug/l	BC	09/24/07	22:51
VINYL CHLORIDE									
	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/24/07	22:51
XYLENES, TOTAL									
	524.2R4.1			0.5	ND	ug/l	BC	09/24/07	22:51
METHYL tert-BUTYL ETHER (MTBE)									

Analyte Count: 22

2007



IN

609



Starting Sample: CL56591

Report Date: 09/28/07

Page 2 of 2

WELL C

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL C	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:00	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4°C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

cis-1,2-DICHLOROETHYLENE  
VINYL CHLORIDE

trans-1,2-DICHLOROETHYLENE

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

VINYL CHLORIDE

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



07072342

COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56582

Report Date: 10/01/07

Page 1 of 2

## Report Details

Sample Number: CL56582

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time		
	BENZENE	2990	5	0.5	ND	ug/l	BC	09/25/07	02:53	
	CARBON TETRACHLORIDE	2982	5	0.5	ND	ug/l	BC	09/25/07	02:53	
	CHLORO BENZENE (MONO)	524.2R4.1	100	0.5	ND	ug/l	BC	09/25/07	02:53	
	cis-1,2-DICHLOROETHYLENE	2972	70	0.5	27.8	ug/l	BC	09/25/07	02:53	
	1,2-DICHLORO BENZENE (ORTHO)	2968	600	0.5	ND	ug/l	BC	09/25/07	02:53	
	1,4-DICHLORO BENZENE (PARA)	2969	75	0.5	ND	ug/l	BC	09/25/07	02:53	
	1,2-DICHLOROETHANE	2968	5	0.5	ND	ug/l	BC	09/25/07	02:53	
	1,1-DICHLOROETHYLENE	2977	7	0.5	ND	ug/l	BC	09/25/07	02:53	
	1,2-DICHLOROPROPANE	2983	5	0.5	ND	ug/l	BC	09/25/07	02:53	
	ETHYLBENZENE	2992	700	0.5	ND	ug/l	BC	09/25/07	02:53	
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1	5	0.5	ND	ug/l	BC	09/25/07	02:53	
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC	09/25/07	02:53
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/25/07	02:53
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/25/07	02:53
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	0.8	ug/l	BC	09/25/07	02:53
	1,2,4-TRICHLORO BENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/25/07	02:53
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/25/07	02:53
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/25/07	02:53
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/25/07	02:53
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	4.8	ug/l	BC	09/25/07	02:53
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/25/07	02:53
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1		0.5	ND	ug/l	BC	09/25/07	02:53	

Analyte Count: 22

2007



IN

609

A

Starting Sample: CL56582  
 Report Date: 10/01/07  
 Page 2 of 2

WELL D1

RAW

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09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL D1	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	13:18	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4°C

### Disclosures:

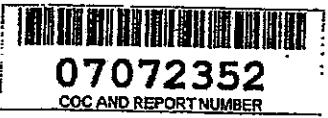
**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



IN  
609

A

Starting Sample: CL56592  
Report Date: 09/28/07  
Page 1 of 2

## Report Details

Sample Number: CL56592

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC 09/24/07 23:26
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC 09/24/07 23:26
	CHLOROBENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC 09/24/07 23:26
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	ND	ug/l	BC 09/24/07 23:26
	1,2-DICHLOROBENZENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC 09/24/07 23:26
	1,4-DICHLOROBENZENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC 09/24/07 23:26
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC 09/24/07 23:26
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC 09/24/07 23:26
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC 09/24/07 23:26
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	ND	ug/l	BC 09/24/07 23:26
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC 09/24/07 23:26
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC 09/24/07 23:26
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC 09/24/07 23:26
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC 09/24/07 23:26
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC 09/24/07 23:26
	1,2,4-TRICHLOROBENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC 09/24/07 23:26
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC 09/24/07 23:26
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC 09/24/07 23:26
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC 09/24/07 23:26
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	ND	ug/l	BC 09/24/07 23:26
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC 09/24/07 23:26
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC 09/24/07 23:26

Analyte Count: 22

2007



IN

609



Starting Sample: CL56592

Report Date: 09/28/07

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WELL E1

RAW

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09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL E1	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	13:25	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department *[Signature]*  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007

07072356  
COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56596  
Report Date: 09/28/07  
Page 1 of 2

## Report Details

Sample Number: CL56596

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time	
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/25/07 01:10
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/25/07 01:10
	CHLOROBENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC	09/25/07 01:10
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	ND	ug/l	BC	09/25/07 01:10
	1,2-DICHLOROBENZENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/25/07 01:10
	1,4-DICHLOROBENZENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/25/07 01:10
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/25/07 01:10
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/25/07 01:10
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/25/07 01:10
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	ND	ug/l	BC	09/25/07 01:10
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC	09/25/07 01:10
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC	09/25/07 01:10
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/25/07 01:10
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/25/07 01:10
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/25/07 01:10
	1,2,4-TRICHLOROBENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/25/07 01:10
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/25/07 01:10
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/25/07 01:10
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/25/07 01:10
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	ND	ug/l	BC	09/25/07 01:10
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/25/07 01:10
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC	09/25/07 01:10

Analyte Count: 22

2007



IN

A

609

Starting Sample: CL56596

Report Date: 09/28/07

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WELL F1

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL F1	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	13:12	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4°C

### Disclosures:

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *DJM*

Finalized By: Cheryl D. Norton, Laboratory Director *CDN*

2007



07072353  
COC AND REPORT NUMBER

IN  
609  
A

Starting Sample: CL56593  
Report Date: 09/28/07  
Page 1 of 2

## Report Details

Sample Number: CL56593

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	BENZENE	2990	5	0.5	ND	ug/l	BC	09/25/07 00:00
	CARBON TETRACHLORIDE	2982	5	0.5	ND	ug/l	BC	09/25/07 00:00
	CHLOROBENZENE (MONO)		100	0.5	ND	ug/l	BC	09/25/07 00:00
	cis-1,2-DICHLOROETHYLENE	2972	70	0.5	ND	ug/l	BC	09/25/07 00:00
	1,2-DICHLOROBENZENE (ORTHO)	2968	600	0.5	ND	ug/l	BC	09/25/07 00:00
	1,4-DICHLOROBENZENE (PARA)	2969	75	0.5	ND	ug/l	BC	09/25/07 00:00
	1,2-DICHLOROETHANE	2968	5	0.5	ND	ug/l	BC	09/25/07 00:00
	1,1-DICHLOROETHYLENE	2977	7	0.5	ND	ug/l	BC	09/25/07 00:00
	1,2-DICHLOROPROPANE	2983	5	0.5	ND	ug/l	BC	09/25/07 00:00
	ETHYLBENZENE	2992	700	0.5	ND	ug/l	BC	09/25/07 00:00
	DICHLOROMETHANE (METHYLENE CHLORIDE)		5	0.5	ND	ug/l	BC	09/25/07 00:00
	STYRENE	2996	100	0.5	ND	ug/l	BC	09/25/07 00:00
	TETRACHLOROETHYLENE (PCE)	2987	5	0.5	ND	ug/l	BC	09/25/07 00:00
	TOLUENE	2991	1000	0.5	ND	ug/l	BC	09/25/07 00:00
	trans-1,2-DICHLOROETHYLENE	2979	100	0.5	ND	ug/l	BC	09/25/07 00:00
	1,2,4-TRICHLOROBENZENE	2378	70	0.5	ND	ug/l	BC	09/25/07 00:00
	1,1,1-TRICHLOROETHANE	2981	200	0.5	ND	ug/l	BC	09/25/07 00:00
	1,1,2-TRICHLOROETHANE	2985	5	0.5	ND	ug/l	BC	09/25/07 00:00
	TRICHLOROETHYLENE (TCE)	2984	5	0.5	ND	ug/l	BC	09/25/07 00:00
	VINYL CHLORIDE	2976	2	0.5	ND	ug/l	BC	09/25/07 00:00
	XYLENES, TOTAL	2955	10000	0.5	ND	ug/l	BC	09/25/07 00:00
	METHYL tert-BUTYL ETHER (MTBE)			0.5	ND	ug/l	BC	09/25/07 00:00

Analyte Count: 22

2007



IN

609

A

Starting Sample: CL56593  
 Report Date: 09/28/07  
 Page 2 of 2

WELL G1

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL G1	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:50	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *ELOM*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



07072347

COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56587

Report Date: 09/28/07

Page 1 of 2

## Report Details

Sample Number: CL56587

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC 09/24/07 20:33
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC 09/24/07 20:33
	CHLOROBENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC 09/24/07 20:33
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	ND	ug/l	BC 09/24/07 20:33
	1,2-DICHLOROETHYLENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC 09/24/07 20:33
	1,4-DICHLOROETHYLENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC 09/24/07 20:33
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC 09/24/07 20:33
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC 09/24/07 20:33
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC 09/24/07 20:33
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	ND	ug/l	BC 09/24/07 20:33
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC 09/24/07 20:33
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC 09/24/07 20:33
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC 09/24/07 20:33
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC 09/24/07 20:33
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC 09/24/07 20:33
	1,2,4-TRICHLOROETHYLENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC 09/24/07 20:33
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC 09/24/07 20:33
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC 09/24/07 20:33
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC 09/24/07 20:33
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	ND	ug/l	BC 09/24/07 20:33
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC 09/24/07 20:33
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC 09/24/07 20:33

Analyte Count: 22

2007



IN

609

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Starting Sample: CL56587

Report Date: 09/28/07

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WELL G2

RAW

COLLECTED

09/19/07

# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL G2	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:55	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

STYRENE

**No deviations from the method criteria were noted unless listed below.**

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007		IN	A
	07072348 COC AND REPORT NUMBER	609	

Starting Sample: CL56588  
Report Date: 09/28/07  
Page 1 of 2

## Report Details

Sample Number: CL56588

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC 09/24/07 21:07
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC 09/24/07 21:07
	CHLOROBENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC 09/24/07 21:07
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	ND	ug/l	BC 09/24/07 21:07
	1,2-DICHLOROBENZENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC 09/24/07 21:07
	1,4-DICHLOROBENZENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC 09/24/07 21:07
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC 09/24/07 21:07
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC 09/24/07 21:07
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC 09/24/07 21:07
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	ND	ug/l	BC 09/24/07 21:07
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC 09/24/07 21:07
	STYRENE	524.2R4.1	2996	100	0.5	0.8	ug/l	BC 09/24/07 21:07
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC 09/24/07 21:07
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC 09/24/07 21:07
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC 09/24/07 21:07
	1,2,4-TRICHLOROBENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC 09/24/07 21:07
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC 09/24/07 21:07
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC 09/24/07 21:07
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC 09/24/07 21:07
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	ND	ug/l	BC 09/24/07 21:07
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC 09/24/07 21:07
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC 09/24/07 21:07

Analyte Count: 22

2007



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Starting Sample: CL56588  
 Report Date: 09/28/07  
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WELL 16

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 16	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:33	Received Time:	09:00
Sampler:	L WOOD			Received Temp:	4°C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

STYRENE

**No deviations from the method criteria were noted unless listed below.**

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department *[Signature]*  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



07072349  
COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56589

Report Date: 09/28/07

Page 1 of 2

## Report Details

Sample Number: CL56589

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/24/07 21:42
BENZENE								
	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/24/07 21:42
CARBON TETRACHLORIDE								
	524.2R4.1		100	0.5	ND	ug/l	BC	09/24/07 21:42
CHLOROBENZENE (MONO)								
	524.2R4.1	2972	70	0.5	ND	ug/l	BC	09/24/07 21:42
cis-1,2-DICHLOROETHYLENE								
	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/24/07 21:42
1,2-DICHLOROBENZENE (ORTHO)								
	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/24/07 21:42
1,4-DICHLOROBENZENE (PARA)								
	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/24/07 21:42
1,2-DICHLOROETHANE								
	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/24/07 21:42
1,1-DICHLOROETHYLENE								
	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/24/07 21:42
1,2-DICHLOROPROPANE								
	524.2R4.1	2992	700	0.5	ND	ug/l	BC	09/24/07 21:42
ETHYLBENZENE								
	524.2R4.1		5	0.5	ND	ug/l	BC	09/24/07 21:42
DICHLOROMETHANE (METHYLENE CHLORIDE)								
	524.2R4.1	2996	100	0.5	0.6	ug/l	BC	09/24/07 21:42
STYRENE								
	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/24/07 21:42
TETRACHLOROETHYLENE (PCE)								
	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/24/07 21:42
TOLUENE								
	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/24/07 21:42
trans-1,2-DICHLOROETHYLENE								
	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/24/07 21:42
1,2,4-TRICHLOROBENZENE								
	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/24/07 21:42
1,1,1-TRICHLOROETHANE								
	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/24/07 21:42
1,1,2-TRICHLOROETHANE								
	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/24/07 21:42
TRICHLOROETHYLENE (TCE)								
	524.2R4.1	2976	2	0.5	ND	ug/l	BC	09/24/07 21:42
VINYL CHLORIDE								
	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/24/07 21:42
XYLENES, TOTAL								
	524.2R4.1			0.5	ND	ug/l	BC	09/24/07 21:42
METHYL tert-BUTYL ETHER (MTBE)								

Analyte Count: 22

2007



IN

609

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Starting Sample: CL56589

Report Date: 09/28/07

Page 2 of 2

WELL 17

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 17	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:25	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

STYRENE

**No deviations from the method criteria were noted unless listed below.**

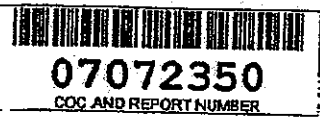
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *DOM*

Finalized By: Cheryl D. Norton, Laboratory Director *cdn*

2007



07072350  
COC AND REPORT NUMBER

IN  
609



Starting Sample: CL56590  
Report Date: 09/28/07  
Page 1 of 2

## Report Details

Sample Number: CL56590

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/24/07 22:16
BENZENE	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/24/07 22:16
CARBON TETRACHLORIDE	524.2R4.1		100	0.5	ND	ug/l	BC	09/24/07 22:16
CHLOROBENZENE (MONO)	524.2R4.1	2972	70	0.5	ND	ug/l	BC	09/24/07 22:16
cis-1,2-DICHLOROETHYLENE	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/24/07 22:16
1,2-DICHLOROBENZENE (ORTHO)	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/24/07 22:16
1,4-DICHLOROBENZENE (PARA)	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/24/07 22:16
1,2-DICHLOROETHANE	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/24/07 22:16
1,1-DICHLOROETHYLENE	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/24/07 22:16
1,2-DICHLOROPROPANE	524.2R4.1	2992	700	0.5	ND	ug/l	BC	09/24/07 22:16
ETHYLBENZENE	524.2R4.1		5	0.5	ND	ug/l	BC	09/24/07 22:16
DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1	2996	100	0.5	0.6	ug/l	BC	09/24/07 22:16
STYRENE	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/24/07 22:16
TETRACHLOROETHYLENE (PCE)	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/24/07 22:16
TOLUENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/24/07 22:16
trans-1,2-DICHLOROETHYLENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/24/07 22:16
1,2,4-TRICHLOROBENZENE	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/24/07 22:16
1,1,1-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/24/07 22:16
1,1,2-TRICHLOROETHANE	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/24/07 22:16
TRICHLOROETHYLENE (TCE)	524.2R4.1	2976	2	0.5	ND	ug/l	BC	09/24/07 22:16
VINYL CHLORIDE	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/24/07 22:16
XYLENES, TOTAL	524.2R4.1			0.5	ND	ug/l	BC	09/24/07 22:16
METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC	09/24/07 22:16

Analyte Count: 22

2007



07072350

COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56590

Report Date: 09/28/07

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WELL 18

RAW

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09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 18	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	11:43	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

cis-1,2-DICHLOROETHYLENE	ETHYLBENZENE
TOLUENE	VINYL CHLORIDE
XYLENES, TOTAL	

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department *DSM*

Reviewed By: QA/QC Review *DSM*

Finalized By: Cheryl D. Norton, Laboratory Director *cdn*

2007



07072343

COC AND REPORT NUMBER

IN  
609

A

Starting Sample: CL56583

Report Date: 10/01/07

Page 1 of 2

## Report Details

Sample Number: CL56583

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time	
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/25/07 03:28
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/25/07 03:28
	CHLORO BENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC	09/25/07 03:28
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	1.8	ug/l	BC	09/25/07 03:28
	1,2-DICHLORO BENZENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/25/07 03:28
	1,4-DICHLORO BENZENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/25/07 03:28
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/25/07 03:28
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/25/07 03:28
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/25/07 03:28
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	0.6	ug/l	BC	09/25/07 03:28
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC	09/25/07 03:28
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC	09/25/07 03:28
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/25/07 03:28
	TOLUENE	524.2R4.1	2991	1000	0.5	1.5	ug/l	BC	09/25/07 03:28
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/25/07 03:28
	1,2,4-TRICHLORO BENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/25/07 03:28
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/25/07 03:28
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/25/07 03:28
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/25/07 03:28
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	1.8	ug/l	BC	09/25/07 03:28
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	3.9	ug/l	BC	09/25/07 03:28
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC	09/25/07 03:28

Analyte Count: 22

2007



07072343

COC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56583

Report Date: 10/01/07

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WELL 19

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 19	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	11:33	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

cis-1,2-DICHLOROETHYLENE                      VINYL CHLORIDE

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

VINYL CHLORIDE

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *awm*

Finalized By: Cheryl D. Norton, Laboratory Director *cdn*

2007		IN	A
		07072344 COC AND REPORT NUMBER	

Starting Sample: CL56584  
Report Date: 10/01/07  
Page 1 of 2

## Report Details

Sample Number: CL56584

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	BENZENE	524.2R4.1	2990	5	0.5	ND	ug/l	BC 09/25/07 04:03
	CARBON TETRACHLORIDE	524.2R4.1	2982	5	0.5	ND	ug/l	BC 09/25/07 04:03
	CHLOROBENZENE (MONO)	524.2R4.1		100	0.5	ND	ug/l	BC 09/25/07 04:03
	cis-1,2-DICHLOROETHYLENE	524.2R4.1	2972	70	0.5	7.2	ug/l	BC 09/25/07 04:03
	1,2-DICHLOROBENZENE (ORTHO)	524.2R4.1	2968	600	0.5	ND	ug/l	BC 09/25/07 04:03
	1,4-DICHLOROBENZENE (PARA)	524.2R4.1	2969	75	0.5	ND	ug/l	BC 09/25/07 04:03
	1,2-DICHLOROETHANE	524.2R4.1	2968	5	0.5	ND	ug/l	BC 09/25/07 04:03
	1,1-DICHLOROETHYLENE	524.2R4.1	2977	7	0.5	ND	ug/l	BC 09/25/07 04:03
	1,2-DICHLOROPROPANE	524.2R4.1	2983	5	0.5	ND	ug/l	BC 09/25/07 04:03
	ETHYLBENZENE	524.2R4.1	2992	700	0.5	ND	ug/l	BC 09/25/07 04:03
	DICHLOROMETHANE (METHYLENE CHLORIDE)	524.2R4.1		5	0.5	ND	ug/l	BC 09/25/07 04:03
	STYRENE	524.2R4.1	2996	100	0.5	ND	ug/l	BC 09/25/07 04:03
	TETRACHLOROETHYLENE (PCE)	524.2R4.1	2987	5	0.5	ND	ug/l	BC 09/25/07 04:03
	TOLUENE	524.2R4.1	2991	1000	0.5	ND	ug/l	BC 09/25/07 04:03
	trans-1,2-DICHLOROETHYLENE	524.2R4.1	2979	100	0.5	ND	ug/l	BC 09/25/07 04:03
	1,2,4-TRICHLOROBENZENE	524.2R4.1	2378	70	0.5	ND	ug/l	BC 09/25/07 04:03
	1,1,1-TRICHLOROETHANE	524.2R4.1	2981	200	0.5	ND	ug/l	BC 09/25/07 04:03
	1,1,2-TRICHLOROETHANE	524.2R4.1	2985	5	0.5	ND	ug/l	BC 09/25/07 04:03
	TRICHLOROETHYLENE (TCE)	524.2R4.1	2984	5	0.5	ND	ug/l	BC 09/25/07 04:03
	VINYL CHLORIDE	524.2R4.1	2976	2	0.5	5.5	ug/l	BC 09/25/07 04:03
	XYLENES, TOTAL	524.2R4.1	2955	10000	0.5	ND	ug/l	BC 09/25/07 04:03
	METHYL tert-BUTYL ETHER (MTBE)	524.2R4.1			0.5	ND	ug/l	BC 09/25/07 04:03

Analyte Count: 22

2007



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Starting Sample: CL56584

Report Date: 10/01/07

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WELL 20

RAW

COLLECTED

09/18/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/28/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 20	Collection Date:	09/18/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:53	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

cis-1,2-DICHLOROETHYLENE

VINYL CHLORIDE

**No deviations from the method criteria were noted unless listed below.**

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



07072345  
CQC AND REPORT NUMBER

IN

609

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Starting Sample: CL56585

Report Date: 09/28/07

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## Report Details

Sample Number: CL56585

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time	
	524.2R4.1	2990	5	0.5	ND	ug/l	BC	09/25/07	04:37
BENZENE									
	524.2R4.1	2982	5	0.5	ND	ug/l	BC	09/25/07	04:37
CARBON TETRACHLORIDE									
	524.2R4.1		100	0.5	ND	ug/l	BC	09/25/07	04:37
CHLOROBENZENE (MONO)									
	524.2R4.1	2972	70	0.5	3.2	ug/l	BC	09/25/07	04:37
cis-1,2-DICHLOROETHYLENE									
	524.2R4.1	2968	600	0.5	ND	ug/l	BC	09/25/07	04:37
1,2-DICHLOROBENZENE (ORTHO)									
	524.2R4.1	2969	75	0.5	ND	ug/l	BC	09/25/07	04:37
1,4-DICHLOROBENZENE (PARA)									
	524.2R4.1	2968	5	0.5	ND	ug/l	BC	09/25/07	04:37
1,2-DICHLOROETHANE									
	524.2R4.1	2977	7	0.5	ND	ug/l	BC	09/25/07	04:37
1,1-DICHLOROETHYLENE									
	524.2R4.1	2983	5	0.5	ND	ug/l	BC	09/25/07	04:37
1,2-DICHLOROPROPANE									
	524.2R4.1	2992	700	0.5	ND	ug/l	BC	09/25/07	04:37
ETHYLBENZENE									
	524.2R4.1		5	0.5	ND	ug/l	BC	09/25/07	04:37
DICHLOROMETHANE (METHYLENE CHLORIDE)									
	524.2R4.1	2996	100	0.5	ND	ug/l	BC	09/25/07	04:37
STYRENE									
	524.2R4.1	2987	5	0.5	ND	ug/l	BC	09/25/07	04:37
TETRACHLOROETHYLENE (PCE)									
	524.2R4.1	2991	1000	0.5	ND	ug/l	BC	09/25/07	04:37
TOLUENE									
	524.2R4.1	2979	100	0.5	ND	ug/l	BC	09/25/07	04:37
trans-1,2-DICHLOROETHYLENE									
	524.2R4.1	2378	70	0.5	ND	ug/l	BC	09/25/07	04:37
1,2,4-TRICHLOROBENZENE									
	524.2R4.1	2981	200	0.5	ND	ug/l	BC	09/25/07	04:37
1,1,1-TRICHLOROETHANE									
	524.2R4.1	2985	5	0.5	ND	ug/l	BC	09/25/07	04:37
1,1,2-TRICHLOROETHANE									
	524.2R4.1	2984	5	0.5	ND	ug/l	BC	09/25/07	04:37
TRICHLOROETHYLENE (TCE)									
	524.2R4.1	2976	2	0.5	1.4	ug/l	BC	09/25/07	04:37
VINYL CHLORIDE									
	524.2R4.1	2955	10000	0.5	ND	ug/l	BC	09/25/07	04:37
XYLENES, TOTAL									
	524.2R4.1			0.5	ND	ug/l	BC	09/25/07	04:37
METHYL tert-BUTYL ETHER (MTBE)									

Analyte Count: 22

2007



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609

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Starting Sample: CL56585

Report Date: 09/28/07

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WELL 21

RAW

COLLECTED 09/18/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Volatile Organic Chemical (VOC) Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 09/26/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 21	Collection Date:	09/18/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:46	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

**No deviations from the method criteria were noted unless listed below.**  
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *ASM*

Finalized By: Cheryl D. Norton, Laboratory Director *CWN*

007

07072346  
COC AND REPORT NUMBER

IN  
609  
A

Starting Sample: CL56586  
Report Date: 09/26/07  
Page 1 of 2

## Report Details

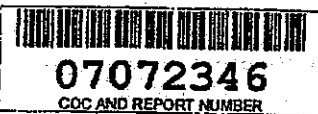
Sample Number: CL56586

Sample Status: REPORT QUEUE

Qualifier Code	Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
	524.2R4.1	2990	5	0.5	ND	ug/l	LT	09/22/07 01:58
BENZENE								
	524.2R4.1	2982	5	0.5	ND	ug/l	LT	09/22/07 01:58
CARBON TETRACHLORIDE								
	524.2R4.1		100	0.5	ND	ug/l	LT	09/22/07 01:58
CHLOROBENZENE (MONO)								
	524.2R4.1	2972	70	0.5	ND	ug/l	LT	09/22/07 01:58
cis-1,2-DICHLOROETHYLENE								
	524.2R4.1	2968	600	0.5	ND	ug/l	LT	09/22/07 01:58
1,2-DICHLOROETHYLENE (ORTHO)								
	524.2R4.1	2969	75	0.5	ND	ug/l	LT	09/22/07 01:58
1,4-DICHLOROETHYLENE (PARA)								
	524.2R4.1	2968	5	0.5	ND	ug/l	LT	09/22/07 01:58
1,2-DICHLOROETHANE								
	524.2R4.1	2977	7	0.5	ND	ug/l	LT	09/22/07 01:58
1,1-DICHLOROETHYLENE								
	524.2R4.1	2983	5	0.5	ND	ug/l	LT	09/22/07 01:58
1,2-DICHLOROPROPANE								
	524.2R4.1	2992	700	0.5	ND	ug/l	LT	09/22/07 01:58
ETHYLBENZENE								
	524.2R4.1		5	0.5	ND	ug/l	LT	09/22/07 01:58
DICHLOROMETHANE (METHYLENE CHLORIDE)								
	524.2R4.1	2996	100	0.5	ND	ug/l	LT	09/22/07 01:58
STYRENE								
	524.2R4.1	2987	5	0.5	ND	ug/l	LT	09/22/07 01:58
TETRACHLOROETHYLENE (PCE)								
	524.2R4.1	2991	1000	0.5	ND	ug/l	LT	09/22/07 01:58
TOLUENE								
	524.2R4.1	2979	100	0.5	ND	ug/l	LT	09/22/07 01:58
trans-1,2-DICHLOROETHYLENE								
	524.2R4.1	2378	70	0.5	ND	ug/l	LT	09/22/07 01:58
1,2,4-TRICHLOROETHYLENE								
	524.2R4.1	2981	200	0.5	ND	ug/l	LT	09/22/07 01:58
1,1,1-TRICHLOROETHANE								
	524.2R4.1	2985	5	0.5	ND	ug/l	LT	09/22/07 01:58
1,1,2-TRICHLOROETHANE								
	524.2R4.1	2984	5	0.5	ND	ug/l	LT	09/22/07 01:58
TRICHLOROETHYLENE (TCE)								
	524.2R4.1	2976	2	0.5	ND	ug/l	LT	09/22/07 01:58
VINYL CHLORIDE								
	524.2R4.1	2955	10000	0.5	ND	ug/l	LT	09/22/07 01:58
XYLENES, TOTAL								
	524.2R4.1			0.5	ND	ug/l	LT	09/22/07 01:58
METHYL tert-BUTYL ETHER (MTBE)								

Analyte Count: 22

2007



IN

609

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Starting Sample: CL56586

Report Date: 09/26/07

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WILDCAT CREEK

RAW

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09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WILDCAT CREEK	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:53	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |            |          |
|------------|----------|
| ARSENIC    | NICKEL   |
| MOLYBDENUM | ALUMINUM |
| MANGANESE  | BORON    |
| IRON       | BARIUM   |
| STRONTIUM  | SODIUM   |
| MAGNESIUM  | CALCIUM  |

**No deviations from the method criteria were noted unless listed below.**

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department

Reviewed By: QA/QC Review *DJOM*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



07072338

QC AND REPORT NUMBER

IN

609

A

Starting Sample: CL56578

Report Date: 10/01/07

Page 1 of 2

WILDCAT CREEK

RAW

COLLECTED

09/19/07

Report Details

Sample Number: CL56578

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
IRON		200.7R4.4		0.3(s)	0.10	0.11	mg/l	JB	09/27/07	13:09
CALCIUM		200.7R4.4			1	48	mg/l	JB	09/27/07	13:09
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	JB	09/27/07	13:09
MAGNESIUM		200.7R4.4			1	26	mg/l	JB	09/27/07	13:09
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	09/27/07	13:09
SILICA		200.7R4.4			10	ND	mg/l	JB	09/27/07	13:09
SODIUM		200.7R4.4	1052		1	18	mg/l	JB	09/27/07	13:09
STRONTIUM		200.7R4.4			0.050	0.313	mg/l	JB	09/27/07	13:09

Analyte Count: 8

Sample Number: CL56578

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
ALUMINUM		200.8R5.4		0.2(s)	0.010	0.022	mg/l	LG	09/27/07	11:41
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/27/07	11:41
ARSENIC		200.8R5.4	1005	0.010	0.001	0.002	mg/l	LG	09/27/07	11:41
BARIUM		200.8R5.4	1010	2	0.001	0.126	mg/l	LG	09/27/07	11:41
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/27/07	11:41
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/27/07	11:41
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/27/07	11:41
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/27/07	11:41
MANGANESE		200.8R5.4		0.05(s)	0.010	0.030	mg/l	LG	09/27/07	11:41
NICKEL		200.8R5.4	1036		0.0005	0.0028	mg/l	LG	09/27/07	11:41
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/27/07	11:41
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/27/07	11:41
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/27/07	11:41
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	09/27/07	11:41
BORON		200.8R5.4			0.050	0.051	mg/l	LG	09/27/07	11:41
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/27/07	11:41
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	LG	09/27/07	11:41
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/27/07	11:41

Analyte Count: 18

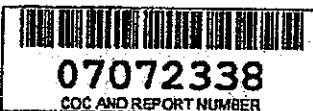
Sample Number: CL56578

Sample Status: REPORT QUEUE

MERCURY	Qualifier Code	Analysis Method	Prep Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
					MCL	Limit					
		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07	15:13

Analyte Count: 1

2007



IN  
609

A

Starting Sample: CL56578

Report Date: 10/01/07

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WELL B

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL B	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	12:09	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |           |            |
|-----------|------------|
| NICKEL    | MOLYBDENUM |
| ZINC      | ARSENIC    |
| BORON     | BARIUM     |
| MANGANESE | STRONTIUM  |
| CALCIUM   | SILICA     |
| IRON      | MAGNESIUM  |
| SODIUM    |            |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

ARSENIC

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

MANGANESE                      IRON

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *DOM*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

WELL B

RAW

COLLECTED

09/19/07

Report Details

Sample Number: CL56576

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	2.94	mg/l	TD	09/24/07 10:29
CALCIUM		200.7R4.4			1	144	mg/l	TD	09/24/07 10:29
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	TD	09/24/07 10:29
MAGNESIUM		200.7R4.4			1	40	mg/l	TD	09/24/07 10:29
POTASSIUM		200.7R4.4			5	ND	mg/l	TD	09/24/07 10:29
SILICA		200.7R4.4			10	16	mg/l	TD	09/24/07 10:29
SODIUM		200.7R4.4	1052		1	44	mg/l	TD	09/24/07 10:29
STRONTIUM		200.7R4.4			0.050	0.527	mg/l	TD	09/24/07 10:29

Analyte Count: 8

Sample Number: CL56576

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINIUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	09/24/07 12:34
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/24/07 12:34
ARSENIC		200.8R5.4	1005	0.010	0.001	0.041	mg/l	LG	09/24/07 12:34
BARIUM		200.8R5.4	1010	2	0.001	0.140	mg/l	LG	09/24/07 12:34
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/24/07 12:34
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/24/07 12:34
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/24/07 12:34
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/24/07 12:34
MANGANESE		200.8R5.4		0.05(s)	0.010	0.234	mg/l	LG	09/24/07 12:34
NICKEL		200.8R5.4	1036		0.0005	0.0053	mg/l	LG	09/24/07 12:34
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/24/07 12:34
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/24/07 12:34
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/24/07 12:34
ZINC		200.8R5.4		5.0(s)	0.010	0.024	mg/l	LG	09/24/07 12:34
BORON		200.8R5.4			0.050	0.093	mg/l	LG	09/24/07 12:34
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/24/07 12:34
MOLYBDENUM		200.8R5.4			0.001	0.006	mg/l	LG	09/24/07 12:34
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/24/07 12:34

Analyte Count: 18

Sample Number: CL56576

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07 15:10

Analyte Count: 1

2007



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609



Starting Sample: CL56576

Report Date: 10/01/07

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WELL C

RAW

COLLECTED 09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL C	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	11:58	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |         |            |
|---------|------------|
| NICKEL  | MOLYBDENUM |
| ZINC    | MANGANESE  |
| BARIUM  | BORON      |
| ARSENIC | STRONTIUM  |
| IRON    | CALCIUM    |
| SILICA  | MAGNESIUM  |
| SODIUM  |            |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

ARSENIC

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

MANGANESE                      IRON

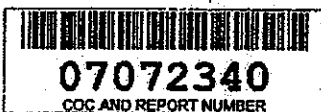
Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *RAM*

Finalized By: Cheryl D. Norton, Laboratory Director *C/N*

2007



IN  
609



Starting Sample: CL56580  
Report Date: 10/01/07  
Page 1 of 2

**Report Details**

Sample Number: CL56580      Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	0.88	mg/l	TD	09/24/07 10:43
CALCIUM		200.7R4.4			1	144	mg/l	TD	09/24/07 10:43
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	TD	09/24/07 10:43
MAGNESIUM		200.7R4.4			1	40	mg/l	TD	09/24/07 10:43
POTASSIUM		200.7R4.4			5	ND	mg/l	TD	09/24/07 10:43
SILICA		200.7R4.4			10	24	mg/l	TD	09/24/07 10:43
SODIUM		200.7R4.4	1052		1	83	mg/l	TD	09/24/07 10:43
STRONTIUM		200.7R4.4			0.050	0.494	mg/l	TD	09/24/07 10:43

Analyte Count: 8

Sample Number: CL56580      Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	09/24/07 12:47
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/24/07 12:47
ARSENIC		200.8R5.4	1005	0.010	0.001	0.304	mg/l	LG	09/24/07 12:47
BARIUM		200.8R5.4	1010	2	0.001	0.092	mg/l	LG	09/24/07 12:47
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/24/07 12:47
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/24/07 12:47
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/24/07 12:47
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/24/07 12:47
MANGANESE		200.8R5.4		0.05(s)	0.010	0.083	mg/l	LG	09/24/07 12:47
NICKEL		200.8R5.4	1036		0.0005	0.0057	mg/l	LG	09/24/07 12:47
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/24/07 12:47
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/24/07 12:47
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/24/07 12:47
ZINC		200.8R5.4		5.0(s)	0.010	0.014	mg/l	LG	09/24/07 12:47
BORON		200.8R5.4			0.050	0.182	mg/l	LG	09/24/07 12:47
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/24/07 12:47
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	LG	09/24/07 12:47
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/24/07 12:47

Analyte Count: 18

Sample Number: CL56580      Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07 15:16

Analyte Count: 1

2007



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609

A

Starting Sample: CL56580  
Report Date: 10/01/07  
Page 2 of 2

WELL 18

RAW

COLLECTED

09/19/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 18	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	11:42	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |            |           |
|------------|-----------|
| ANTIMONY   | LEAD      |
| SELENIUM   | NICKEL    |
| MOLYBDENUM | ALUMINUM  |
| ZINC       | MANGANESE |
| BARIUM     | BORON     |
| STRONTIUM  | ARSENIC   |
| SODIUM     | MAGNESIUM |
| IRON       | SILICA    |
| CALCIUM    |           |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

ARSENIC

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

MANGANESE                      IRON

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department

Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



IN

609



Starting Sample: CL56581

Report Date: 10/01/07

Page 1 of 2

WELL 18

RAW

COLLECTED

09/19/07

Report Details

Sample Number: CL56581

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
IRON		200.7R4.4		0.3(s)	0.10	3.02	mg/l	JB	09/27/07	13:14
CALCIUM		200.7R4.4			1	99	mg/l	JB	09/27/07	13:14
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	JB	09/27/07	13:14
MAGNESIUM		200.7R4.4			1	29	mg/l	JB	09/27/07	13:14
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	09/27/07	13:14
SILICA		200.7R4.4			10	32	mg/l	JB	09/27/07	13:14
SODIUM		200.7R4.4	1052		1	115	mg/l	JB	09/27/07	13:14
STRONTIUM		200.7R4.4			0.050	0.715	mg/l	JB	09/27/07	13:14

Analyte Count: 8

Sample Number: CL56581

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
ALUMINIUM		200.8R5.4		0.2(s)	0.010	0.014	mg/l	LG	09/27/07	11:46
ANTIMONY		200.8R5.4	1074	0.006	0.0004	0.0007	mg/l	LG	09/27/07	11:46
ARSENIC		200.8R5.4	1005	0.010	0.001	0.890	mg/l	LG	09/27/07	11:46
BARIUM		200.8R5.4	1010	2	0.001	0.127	mg/l	LG	09/27/07	11:46
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/27/07	11:46
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/27/07	11:46
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/27/07	11:46
LEAD		200.8R5.4		0.015	0.001	0.002	mg/l	LG	09/27/07	11:46
MANGANESE		200.8R5.4		0.05(s)	0.010	0.066	mg/l	LG	09/27/07	11:46
NICKEL		200.8R5.4	1036		0.0005	0.0054	mg/l	LG	09/27/07	11:46
SELENIUM		200.8R5.4	1045	0.05	0.002	0.002	mg/l	LG	09/27/07	11:46
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/27/07	11:46
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/27/07	11:46
ZINC		200.8R5.4		5.0(s)	0.010	0.021	mg/l	LG	09/27/07	11:46
BORON		200.8R5.4			0.050	0.170	mg/l	LG	09/27/07	11:46
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/27/07	11:46
MOLYBDENUM		200.8R5.4			0.001	0.012	mg/l	LG	09/27/07	11:46
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/27/07	11:46

Analyte Count: 18

Sample Number: CL56581

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07 15:18

Analyte Count: 1

2007



IN  
609

A

Starting Sample: CL56581

Report Date: 10/01/07

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**American Water Works Service Company, Inc.**

Quality Control and Research Laboratory - 1115 South Illinois Street  
 Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



**Inorganic Chemical Analysis Report  
 PROCESS**

INDIANA-AMERICAN WATER COMPANY  
 KOKOMO DISTRICT  
 PO BOX 740  
 1700 E SUPERIOR STREET  
 KOKOMO IN 46903-0740

Date of Report: 10/01/07  
 Certification Number: C-IL-01  
 PWS ID: IN5234007  
 County: HOWARD

Send Report to: J. ROBINSON  
 LAB DOCUMENT

**Report Summary**

Location	WELL 19	Collection Date:	09/19/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	11:32	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

**Disclosures:**

Results are at or above the reporting limit for the following analytes:

- |           |            |
|-----------|------------|
| NICKEL    | MOLYBDENUM |
| MANGANESE | BORON      |
| BARIUM    | ARSENIC    |
| STRONTIUM | CALCIUM    |
| IRON      | SILICA     |
| MAGNESIUM | SODIUM     |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated MCL for the analytes listed below.

ARSENIC

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

IRON

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
 Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007 07072337 COC AND REPORT NUMBER IN 609 A

WELL 19

RAW

COLLECTED

09/19/07

Report Details

Sample Number: CL56577

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
IRON		200.7R4.4		0.3(s)	0.10	2.47	mg/l	TD	09/24/07	10:34
CALCIUM		200.7R4.4			1	109	mg/l	TD	09/24/07	10:34
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	TD	09/24/07	10:34
MAGNESIUM		200.7R4.4			1	32	mg/l	TD	09/24/07	10:34
POTASSIUM		200.7R4.4			5	ND	mg/l	TD	09/24/07	10:34
SILICA		200.7R4.4			10	26	mg/l	TD	09/24/07	10:34
SODIUM		200.7R4.4	1052		1	91	mg/l	TD	09/24/07	10:34
STRONTIUM		200.7R4.4			0.050	0.773	mg/l	TD	09/24/07	10:34

Analyte Count: 8

Sample Number: CL56577

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	09/24/07	12:38
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/24/07	12:38
ARSENIC		200.8R5.4	1005	0.010	0.001	0.602	mg/l	LG	09/24/07	12:38
BARIUM		200.8R5.4	1010	2	0.001	0.200	mg/l	LG	09/24/07	12:38
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/24/07	12:38
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/24/07	12:38
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/24/07	12:38
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/24/07	12:38
MANGANESE		200.8R5.4		0.05(s)	0.010	0.044	mg/l	LG	09/24/07	12:38
NICKEL		200.8R5.4	1036		0.0005	0.0042	mg/l	LG	09/24/07	12:38
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/24/07	12:38
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/24/07	12:38
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/24/07	12:38
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	09/24/07	12:38
BORON		200.8R5.4			0.050	0.180	mg/l	LG	09/24/07	12:38
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/24/07	12:38
MOLYBDENUM		200.8R5.4			0.001	0.011	mg/l	LG	09/24/07	12:38
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/24/07	12:38

Analyte Count: 18

Sample Number: CL56577

Sample Status: REPORT QUEUE

MERCURY	Qualifier Code	Analysis Method	Prep Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
					MCL	Limit					
		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07	15:12

Analyte Count: 1

2007



IN  
609



Starting Sample: CL56577

Report Date: 10/01/07

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WELL 20

RAW

COLLECTED

09/18/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 20	Collection Date:	09/18/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:52	Received Time:	09:00
Sampler:	L. WOOD			Received Temp:	4 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |            |           |
|------------|-----------|
| ARSENIC    | NICKEL    |
| MOLYBDENUM | MANGANESE |
| BORON      | BARIUM    |
| STRONTIUM  | CALCIUM   |
| SILICA     | IRON      |
| SODIUM     | MAGNESIUM |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

- |           |      |
|-----------|------|
| MANGANESE | IRON |
|-----------|------|

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

*Note: This report may not be reproduced, except in full, without written approval from American Water. All analyses are performed using EPA approved drinking water methodology with appropriate method required QC. Your state may not offer certification for all analytes reported. Some analytes are reported for informational purposes only. All analytes reported meet method requirements unless noted otherwise with a disclosure.*

Prepared By: Documentation Department  
Reviewed By: QA/QC Review *[Signature]*

Finalized By: Cheryl D. Norton, Laboratory Director *[Signature]*

2007



IN  
609



Starting Sample: CL56579

Report Date: 10/01/07

Page 1 of 2

WELL 20

RAW

COLLECTED

09/18/07

Report Details

Sample Number: CL56579

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	2.18	mg/l	TD	09/24/07 10:38
CALCIUM		200.7R4.4			1	116	mg/l	TD	09/24/07 10:38
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	TD	09/24/07 10:38
MAGNESIUM		200.7R4.4			1	37	mg/l	TD	09/24/07 10:38
POTASSIUM		200.7R4.4			5	ND	mg/l	TD	09/24/07 10:38
SILICA		200.7R4.4			10	17	mg/l	TD	09/24/07 10:38
SODIUM		200.7R4.4	1052		1	30	mg/l	TD	09/24/07 10:38
STRONTIUM		200.7R4.4			0.050	0.655	mg/l	TD	09/24/07 10:38

Analyte Count: 8

Sample Number: CL56579

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	09/24/07 12:42
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/24/07 12:42
ARSENIC		200.8R5.4	1005	0.010	0.001	0.004	mg/l	LG	09/24/07 12:42
BARIUM		200.8R5.4	1010	2	0.001	0.241	mg/l	LG	09/24/07 12:42
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/24/07 12:42
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/24/07 12:42
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/24/07 12:42
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/24/07 12:42
MANGANESE		200.8R5.4		0.05(s)	0.010	0.088	mg/l	LG	09/24/07 12:42
NICKEL		200.8R5.4	1036		0.0005	0.0045	mg/l	LG	09/24/07 12:42
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/24/07 12:42
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/24/07 12:42
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/24/07 12:42
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	09/24/07 12:42
BORON		200.8R5.4			0.050	0.109	mg/l	LG	09/24/07 12:42
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/24/07 12:42
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	LG	09/24/07 12:42
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/24/07 12:42

Analyte Count: 18

Sample Number: CL59579

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07 15:15

Analyte Count: 1

2007



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609

A

Starting Sample: CL56579

Report Date: 10/01/07

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WELL 21

RAW

COLLECTED 09/18/07



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/01/07  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location	WELL 21	Collection Date:	09/18/07	Received Date:	09/21/07
Sample Type	RAW	Collection Time:	14:45	Received Time:	09:00
Sampler:	L WOOD			Received Temp:	4°C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |            |           |
|------------|-----------|
| ARSENIC    | NICKEL    |
| MOLYBDENUM | BORON     |
| BARIUM     | MANGANESE |
| STRONTIUM  | SODIUM    |
| CALCIUM    | SILICA    |
| IRON       | MAGNESIUM |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

MANGANESE                      IRON

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

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Prepared By: Documentation Department  
Reviewed By: QA/QC Review *asm*

Finalized By: Cheryl D. Norton, Laboratory Director *cdn*

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07072335  
COC AND REPORT NUMBER

Starting Sample: CL56575  
Report Date: 10/01/07  
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WELL 21

RAW

COLLECTED

09/18/07

Report Details

Sample Number: CL56575

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
IRON		200.7R4.4		0.3(s)	0.10	2.25	mg/l	TD	09/24/07	10:25
CALCIUM		200.7R4.4			1	111	mg/l	TD	09/24/07	10:25
CHROMIUM		200.7R4.4		0.1	0.007	ND	mg/l	TD	09/24/07	10:25
MAGNESIUM		200.7R4.4			1	32	mg/l	TD	09/24/07	10:25
POTASSIUM		200.7R4.4			5	ND	mg/l	TD	09/24/07	10:25
SILICA		200.7R4.4			10	13	mg/l	TD	09/24/07	10:25
SODIUM		200.7R4.4	1052		1	11	mg/l	TD	09/24/07	10:25
STRONTIUM		200.7R4.4			0.050	0.506	mg/l	TD	09/24/07	10:25

Analyte Count: 8

Sample Number: CL56575

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
				MCL	Limit					
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	09/24/07	12:29
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	09/24/07	12:29
ARSENIC		200.8R5.4	1005	0.010	0.001	0.002	mg/l	LG	09/24/07	12:29
BARIUM		200.8R5.4	1010	2	0.001	0.158	mg/l	LG	09/24/07	12:29
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	09/24/07	12:29
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	09/24/07	12:29
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	09/24/07	12:29
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	09/24/07	12:29
MANGANESE		200.8R5.4		0.05(s)	0.010	0.168	mg/l	LG	09/24/07	12:29
NICKEL		200.8R5.4	1036		0.0005	0.0039	mg/l	LG	09/24/07	12:29
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	09/24/07	12:29
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	09/24/07	12:29
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	09/24/07	12:29
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	09/24/07	12:29
BORON		200.8R5.4			0.050	0.081	mg/l	LG	09/24/07	12:29
COBALT		200.8R5.4			0.010	ND	mg/l	LG	09/24/07	12:29
MOLYBDENUM		200.8R5.4			0.001	0.005	mg/l	LG	09/24/07	12:29
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	09/24/07	12:29

Analyte Count: 18

Sample Number: CL56575

Sample Status: REPORT QUEUE

MERCURY	Qualifier Code	Analysis Method	Prep Method	State Code	Reporting		Result	Unit	Analyst	Analysis Date / Time	
					MCL	Limit					
		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/27/07	15:08

Analyte Count: 1

2007



IN  
609

A

Starting Sample: CL56575

Report Date: 10/01/07

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Report Details

Sample Number: CF43442

Sample Status: INACTIVE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.1	1.7	mg/l	SK	09/20/02 12:51
	N6 Q28								
CALCIUM		200.7R4.4			1	103	mg/l	SK	09/20/02 12:51
MAGNESIUM		200.7R4.4			1	31	mg/l	SK	09/20/02 12:51
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	09/20/02 12:51
SODIUM		200.7R4.4	1052		1	107	mg/l	SK	09/20/02 12:51
SILICA		200.7R4.4			10	32	mg/l	SK	09/20/02 12:51

Analyte Count: 6

Sample Number: CF43442

Sample Status: INACTIVE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	0.012	mg/l	JZ	09/19/02 10:52
ARSENIC		200.8R5.4	1005	0.05	0.001	0.914	mg/l	JZ	09/19/02 11:19
	N3 Q28								
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	09/19/02 10:52
BARIUM		200.8R5.4	1010	2	0.001	0.132	mg/l	JZ	09/19/02 10:52
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	09/19/02 10:52
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	09/19/02 10:52
CHROMIUM		200.8R5.4	1020	0.1	0.010	ND	mg/l	JZ	09/19/02 10:52
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	09/19/02 10:52
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	09/19/02 10:52
MANGANESE		200.8R5.4		0.05(s)	0.010	0.056	mg/l	JZ	09/19/02 10:52
	N6 Q28								
NICKEL		200.8R5.4	1036		0.010	ND	mg/l	JZ	09/19/02 10:52
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	JZ	09/19/02 10:52
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	09/19/02 10:52
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	09/19/02 10:52
ZINC		200.8R5.4		5.0(s)	0.010	0.010	mg/l	JZ	09/19/02 10:52
BORON		200.8R5.4			0.050	0.156	mg/l	JZ	09/19/02 10:52
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	09/19/02 10:52
MOLYBDENUM		200.8R5.4			0.001	0.012	mg/l	JZ	09/19/02 10:52
STRONTIUM		200.8R5.4			0.050	0.733	mg/l	JZ	09/19/02 10:52
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	09/19/02 10:52

Analyte Count: 20

Sample Number: CF43442

Sample Status: INACTIVE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JZ	09/24/02 11:09

Analyte Count: 1

WELL B

RAW

COLLECTED

09/10/02

Report Details

Sample Number: CF43444

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.1	2.8	mg/l	SK	09/20/02 13:42
	N6 Q28								
CALCIUM		200.7R4.4			1	138	mg/l	SK	09/20/02 13:42
MAGNESIUM		200.7R4.4			1	39	mg/l	SK	09/20/02 13:42
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	09/20/02 13:42
SODIUM		200.7R4.4	1052		1	42	mg/l	SK	09/20/02 13:42
SILICA		200.7R4.4			10	19	mg/l	SK	09/20/02 13:42

Analyte Count: 6

Sample Number: CF43444

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	ND	mg/l	JZ	09/18/02 12:16
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	09/18/02 12:16
ARSENIC		200.8R5.4	1005	0.05	0.001	0.114	mg/l	JZ	09/18/02 12:16
	N3 Q28								
BARIUM		200.8R5.4	1010	2	0.001	0.120	mg/l	JZ	09/18/02 12:16
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	09/18/02 12:16
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	09/18/02 12:16
CHROMIUM		200.8R5.4	1020	0.1	0.010	0.026	mg/l	JZ	09/18/02 12:16
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	09/18/02 12:16
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	09/18/02 12:16
MANGANESE		200.8R5.4		0.05(s)	0.010	0.200	mg/l	JZ	09/18/02 12:16
	N6 Q28								
NICKEL		200.8R5.4	1036		0.010	ND	mg/l	JZ	09/18/02 12:16
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	JZ	09/18/02 12:16
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	09/18/02 12:16
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	09/18/02 12:16
ZINC		200.8R5.4		5.0(s)	0.010	0.046	mg/l	JZ	09/18/02 12:16
BORON		200.8R5.4			0.050	0.127	mg/l	JZ	09/18/02 12:16
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	09/18/02 12:16
MOLYBDENUM		200.8R5.4			0.001	0.007	mg/l	JZ	09/18/02 12:16
STRONTIUM		200.8R5.4			0.050	0.670	mg/l	JZ	09/18/02 12:16
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	09/18/02 12:16

Analyte Count: 20

Sample Number: CF43444

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		200.8R5.4	1035	0.002	0.0002	ND	mg/l	SK	09/16/02 13:36

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Starting Sample: CF43444

WELL C

RAW

COLLECTED

09/10/02

Report Details

Sample Number: CF43446

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON	N6 Q28	200.7R4.4		0.3(s)	0.1	0.9	mg/l	SK	09/20/02 13:46
CALCIUM		200.7R4.4			1	146	mg/l	SK	09/20/02 13:46
MAGNESIUM		200.7R4.4			1	41	mg/l	SK	09/20/02 13:46
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	09/20/02 13:46
SODIUM		200.7R4.4	1052		1	69	mg/l	SK	09/20/02 13:46
SILICA		200.7R4.4			10	23	mg/l	SK	09/20/02 13:46

Analyte Count: 6

Sample Number: CF43446

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	ND	mg/l	JZ	09/18/02 12:21
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	09/18/02 12:21
ARSENIC		200.8R5.4	1005	0.05	0.001	0.208	mg/l	JZ	09/18/02 12:21
	N3 Q28								
BARIUM		200.8R5.4	1010	2	0.001	0.070	mg/l	JZ	09/18/02 12:21
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	09/18/02 12:21
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	09/18/02 12:21
CHROMIUM		200.8R5.4	1020	0.1	0.010	0.024	mg/l	JZ	09/18/02 12:21
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	09/18/02 12:21
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	09/18/02 12:21
MANGANESE		200.8R5.4		0.05(s)	0.010	0.086	mg/l	JZ	09/18/02 12:21
	N6 Q28								
NICKEL		200.8R5.4	1036		0.010	ND	mg/l	JZ	09/18/02 12:21
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	JZ	09/18/02 12:21
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	09/18/02 12:21
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	09/18/02 12:21
ZINC		200.8R5.4		5.0(s)	0.010	0.021	mg/l	JZ	09/18/02 12:21
BORON		200.8R5.4			0.050	0.222	mg/l	JZ	09/18/02 12:21
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	09/18/02 12:21
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	JZ	09/18/02 12:21
STRONTIUM		200.8R5.4			0.050	0.508	mg/l	JZ	09/18/02 12:21
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	09/18/02 12:21

Analyte Count: 20

Sample Number: CF43446

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		200.8R5.4	1035	0.002	0.0002	ND	mg/l	SK	09/16/02 13:39

2002



IN  
609



Starting Sample: CF43446

WELL 19

RAW

COLLECTED

09/10/02

Report Details

Sample Number: CF43464

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON	N6	200.7R4.4		0.3(s)	0.1	2.2	mg/l	SK	09/20/02 12:47
	Q28								
CALCIUM		200.7R4.4			1	80	mg/l	SK	09/20/02 12:47
MAGNESIUM		200.7R4.4			1	26	mg/l	SK	09/20/02 12:47
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	09/20/02 12:47
SODIUM		200.7R4.4	1052		1	107	mg/l	SK	09/20/02 12:47
SILICA		200.7R4.4			10	27	mg/l	SK	09/20/02 12:47

Analyte Count: 6

Sample Number: CF43464

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	ND	mg/l	JZ	09/19/02 10:58
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	09/19/02 10:58
ARSENIC		200.8R5.4	1005	0.05	0.001	0.619	mg/l	JZ	09/19/02 10:58
	N3								
	Q28								
BARIUM		200.8R5.4	1010	2	0.001	0.158	mg/l	JZ	09/19/02 10:58
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	09/19/02 10:58
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	09/19/02 10:58
CHROMIUM		200.8R5.4	1020	0.1	0.010	ND	mg/l	JZ	09/19/02 10:58
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	09/19/02 10:58
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	09/19/02 10:58
MANGANESE		200.8R5.4		0.05(s)	0.010	0.026	mg/l	JZ	09/19/02 10:58
NICKEL		200.8R5.4	1036		0.010	ND	mg/l	JZ	09/19/02 10:58
SELENIUM		200.8R5.4	1045	0.05	0.002	0.002	mg/l	JZ	09/19/02 10:58
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	09/19/02 10:58
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	09/19/02 10:58
ZINC		200.8R5.4		5.0(s)	0.010	0.012	mg/l	JZ	09/19/02 10:58
BORON		200.8R5.4			0.050	0.177	mg/l	JZ	09/19/02 10:58
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	09/19/02 10:58
MOLYBDENUM		200.8R5.4			0.001	0.017	mg/l	JZ	09/19/02 10:58
STRONTIUM		200.8R5.4			0.050	0.723	mg/l	JZ	09/19/02 10:58
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	09/19/02 10:58

Analyte Count: 20

Sample Number: CF43464

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY	Q28	245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JZ	09/24/02 11:21
	R1									

Analyte Count: 1

2002



IN  
609



Starting Sample: CF43464

Report Details

Sample Number: CF43466

Sample Status: INACTIVE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
CALCIUM		200.7			1	112	mg/l	SK	11/20/02 09:46
IRON		200.7R4.4		0.3(s)	0.1	2 3	mg/l	SK	11/11/02 15:46
	N6 Q28								
MAGNESIUM		200.7R4.4			1	35	mg/l	SK	11/11/02 15:46
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	11/11/02 15:46
SODIUM		200.7R4.4	1052		1	27	mg/l	SK	11/11/02 15:46
SILICA		200.7R4.4			10	17	mg/l	SK	11/11/02 15:46

Analyte Count: 5

Sample Number: CF43466

Sample Status: INACTIVE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	ND	mg/l	JZ	11/12/02 10:04
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	11/12/02 10:04
ARSENIC		200.8R5.4	1005	0.05	0.001	0.004	mg/l	JZ	11/12/02 10:04
BARIUM		200.8R5.4	1010	2	0.001	0.258	mg/l	JZ	11/12/02 10:04
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	11/12/02 10:04
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	11/12/02 10:04
CHROMIUM		200.8R5.4	1020	0.1	0.010	0.024	mg/l	JZ	11/12/02 10:04
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	11/12/02 10:04
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	11/12/02 10:04
MANGANESE		200.8R5.4		0.05(s)	0.010	0.073	mg/l	JZ	11/12/02 10:04
	N6 Q28								
NICKEL		200.8R5.4	1036		0.010	ND	mg/l	JZ	11/12/02 10:04
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	JZ	11/12/02 10:04
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	11/12/02 10:04
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	11/12/02 10:04
ZINC		200.8R5.4		5.0(s)	0.010	0.018	mg/l	JZ	11/12/02 10:04
BORON		200.8R5.4			0.050	0.108	mg/l	JZ	11/12/02 10:04
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	11/12/02 10:04
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	JZ	11/12/02 10:04
STRONTIUM		200.8R5.4			0.050	0.673	mg/l	JZ	11/12/02 10:04
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	11/12/02 10:04

Analyte Count: 20

Sample Number: CF43466

Sample Status: INACTIVE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	SK	11/20/02 09:46

Analyte Count: 1

Sample Number: CF43467

Sample Status: INACTIVE

Minerals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
CHLORIDE		300.0R2.1		250(s)	1.0	65.0	mg/l	PW	11/07/02 21:37
FLUORIDE		300.0R2.1	1025	4p/2s	0.10	0.69	mg/l	PW	11/07/02 21:37
SULFATE		300.0R2.1	1055	250(s)	0.5	80.8	mg/l	PW	11/07/02 21:37

Analyte Count: 3

2002



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COC AND REPORT NUMBER

IN

609

A

Starting Sample: CF43466

WELL 21

RAW

COLLECTED

09/10/02

## Report Details

Sample Number: CF43468

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON	N6 Q28	200.7R4.4		0.3(s)	0.1	2.3	mg/l	SK	09/20/02 14:40
CALCIUM		200.7R4.4			1	116	mg/l	SK	09/20/02 14:40
MAGNESIUM		200.7R4.4			1	35	mg/l	SK	09/20/02 14:40
POTASSIUM		200.7R4.4			5	ND	mg/l	SK	09/20/02 14:40
SODIUM		200.7R4.4	1052		1	19	mg/l	SK	09/20/02 14:40
SILICA		200.7R4.4			10	15	mg/l	SK	09/20/02 14.40

Analyte Count: 6

Sample Number: CF43468

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.20(s)	0.010	ND	mg/l	JZ	09/19/02 10:38
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	JZ	09/19/02 10:38
ARSENIC		200.8R5.4	1005	0.05	0.001	0.002	mg/l	JZ	09/19/02 10:38
BARIUM		200.8R5.4	1010	2	0.001	0.185	mg/l	JZ	09/19/02 10:38
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	JZ	09/19/02 10:38
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	JZ	09/19/02 10:38
CHROMIUM		200.8R5.4	1020	0.1	0.010	0.027	mg/l	JZ	09/19/02 10:38
COPPER		200.8R5.4		1.3	0.010	ND	mg/l	JZ	09/19/02 10:38
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	JZ	09/19/02 10:38
MANGANESE		200.8R5.4		0.05(s)	0.010	0.163	mg/l	JZ	09/19/02 10:38
NICKEL	N6 Q28	200.8R5.4	1036		0.010	ND	mg/l	JZ	09/19/02 10:38
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	JZ	09/19/02 10:38
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	JZ	09/19/02 10:38
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	JZ	09/19/02 10:38
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	JZ	09/19/02 10:38
BORON		200.8R5.4			0.050	0.081	mg/l	JZ	09/19/02 10:38
COBALT		200.8R5.4			0.010	ND	mg/l	JZ	09/19/02 10:38
MOLYBDENUM		200.8R5.4			0.001	0.007	mg/l	JZ	09/19/02 10:38
STRONTIUM		200.8R5.4			0.050	0.645	mg/l	JZ	09/19/02 10:38
VANADIUM		200.8R5.4			0.050	ND	mg/l	JZ	09/19/02 10:38

Analyte Count: 20

Sample Number: CF43468

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		200.8R5.4	1035	0.002	0.0002	ND	mg/l	SK	09/16/02 14:16

Sample Number: CF43469

Sample Status: REPORT QUEUE

Minerals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
CHLORIDE		300.0R2.1		250(s)	1.0	43.7	mg/l	PW	09/16/02 22:25
FLUORIDE		300.0R2.1	1025	4p/2s	0.10	0.56	mg/l	PW	09/16/02 22:25
SULFATE		300.0R2.1	1055	250(s)	0.5	98.4	mg/l	PW	09/16/02 22:25

Analyte Count: 3

2002



IN

609

A

Starting Sample: CF43468

See back of page for explanation of terms used.

Page 2 of 2

WELL C

RAW

COLLECTED

09/26/06

Report Details

Sample Number: CK53854

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	0.84	mg/l	JB	10/05/06 14:48
CALCIUM		200.7R4.4			1	135	mg/l	JB	10/05/06 14:48
MAGNESIUM		200.7R4.4			1	40	mg/l	JB	10/05/06 14:48
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	10/05/06 14:48
SODIUM		200.7R4.4	1052		1	76	mg/l	JB	10/05/06 14:48
SILICA		200.7R4.4			10	26	mg/l	JB	10/05/06 14:48
STRONTIUM		200.7R4.4			0.050	0.466	mg/l	JB	10/05/06 14:48

Analyte Count: 7

Sample Number: CK53854

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	10/04/06 12:54
ANTIMONY		200.8R5.4	1074	0.006	0.0004	0.0005	mg/l	LG	10/04/06 12:54
ARSENIC		200.8R5.4	1005	0.010	0.001	0.268	mg/l	LG	10/04/06 12:54
BARIUM		200.8R5.4	1010	2	0.001	0.096	mg/l	LG	10/04/06 12:54
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	10/04/06 12:54
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	10/04/06 12:54
CHROMIUM		200.8R5.4	1020	0.1	0.007	ND	mg/l	LG	10/04/06 12:54
COPPER		200.8R5.4		1(S)	0.010	0.012	mg/l	LG	10/04/06 12:54
LEAD		200.8R5.4		0.015	0.001	0.001	mg/l	LG	10/04/06 12:54
MANGANESE		200.8R5.4		0.05(s)	0.010	0.081	mg/l	LG	10/04/06 12:54
NICKEL		200.8R5.4	1036		0.0005	0.0083	mg/l	LG	10/04/06 12:54
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	10/04/06 12:54
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	10/04/06 12:54
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	10/04/06 12:54
ZINC		200.8R5.4		5.0(s)	0.010	0.020	mg/l	LG	10/04/06 12:54
BORON		200.8R5.4			0.050	0.193	mg/l	LG	10/04/06 12:54
COBALT		200.8R5.4			0.010	ND	mg/l	LG	10/04/06 12:54
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	LG	10/04/06 12:54
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	10/04/06 12:54

Analyte Count: 19

Sample Number: CK53854

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/29/06 14:26

Analyte Count: 1

200



IN



Starting Sample: CK53854

Report Date: 10/06/06

WELL 21

RAW

COLLECTED

09/26/06



# American Water Works Service Company, Inc.

Quality Control and Research Laboratory - 1115 South Illinois Street  
Belleville, Illinois 62220-3102 - Phone: (618)235-3600 - Fax: (618)235-6349



## Inorganic Chemical Analysis Report PROCESS

INDIANA-AMERICAN WATER COMPANY  
KOKOMO DISTRICT  
PO BOX 740  
1700 E SUPERIOR STREET  
KOKOMO IN 46903-0740

Date of Report: 10/05/06  
Certification Number: C-IL-01  
PWS ID: IN5234007  
County: HOWARD

Send Report to: J. ROBINSON  
LAB DOCUMENT

### Report Summary

Location: WELL 21	Collection Date: 09/26/06	Received Date: 09/27/06
Sample Type: RAW	Collection Time: 13:05	Received Time: 08:56
Sampler: L. WOOD		Received Temp: 3 °C

### Disclosures:

Results are at or above the reporting limit for the following analytes:

- |            |           |
|------------|-----------|
| ARSENIC    | NICKEL    |
| MOLYBDENUM | BORON     |
| MANGANESE  | BARIUM    |
| STRONTIUM  | CALCIUM   |
| SODIUM     | SILICA    |
| IRON       | MAGNESIUM |

**No deviations from the method criteria were noted unless listed below.**

Results are equal to or exceed regulated Secondary MCL for the analytes listed below.

MANGANESE                      IRON

Process Sample - Analyte(s) is(are) not acceptable for compliance purposes.

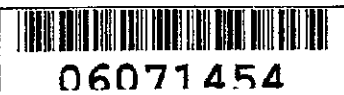
*Note: This report may not be reproduced, except in full, without written approval from American Water Works Service Co., Inc. If you have any questions, concerning this report, please don't hesitate to call the Laboratory Director at (618) 2353600.*

Prepared By: Documentation Department *CW*

Reviewed By: QA/QC Review *W*

Finalized By: Cheryl D. Norton, Laboratory Director *W*

2001



06071454

IN



Starting Sample: CK53858

Report Date: 10/05/06

WELL B

RAW

COLLECTED

11/06/06

Report Details

Sample Number: CK53853

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	3.12	mg/l	JB	11/17/06 17:38
CALCIUM		200.7R4.4			1	116	mg/l	JB	11/17/06 17:38
MAGNESIUM		200.7R4.4			1	33	mg/l	JB	11/17/06 17:38
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	11/17/06 17:38
SODIUM		200.7R4.4	1052		1	89	mg/l	JB	11/17/06 17:38
SILICA		200.7R4.4			10	19	mg/l	JB	11/17/06 17:38
STRONTIUM		200.7R4.4			0.050	0.458	mg/l	JB	11/17/06 17:38

Analyte Count: 7

Sample Number: CK53853

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	0.016	mg/l	LG	11/15/06 12:52
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	11/15/06 12:52
ARSENIC		200.8R5.4	1005	0.010	0.001	0.074	mg/l	LG	11/15/06 12:52
BARIUM		200.8R5.4	1010	2	0.001	0.134	mg/l	LG	11/15/06 12:52
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	11/15/06 12:52
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	11/15/06 12:52
CHROMIUM		200.8R5.4	1020	0.1	0.007	ND	mg/l	LG	11/15/06 12:52
COPPER		200.8R5.4		1(S)	0.010	0.125	mg/l	LG	11/15/06 12:52
LEAD		200.8R5.4		0.015	0.001	0.003	mg/l	LG	11/15/06 12:52
MANGANESE		200.8R5.4		0.05(s)	0.010	0.211	mg/l	LG	11/15/06 12:52
NICKEL		200.8R5.4	1036		0.0005	0.0062	mg/l	LG	11/15/06 12:52
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	11/15/06 12:52
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	11/15/06 12:52
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	11/15/06 12:52
ZINC		200.8R5.4		5.0(s)	0.010	0.046	mg/l	LG	11/15/06 12:52
BORON		200.8R5.4			0.050	0.107	mg/l	LG	11/15/06 12:52
COBALT		200.8R5.4			0.010	ND	mg/l	LG	11/15/06 12:52
MOLYBDENUM		200.8R5.4			0.001	0.013	mg/l	LG	11/15/06 12:52
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	11/15/06 12:52

Analyte Count: 19

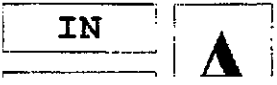
Sample Number: CK53853

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	11/11/06 10:05

Analyte Count: 1

200



Starting Sample: CK53853

Report Date: 11/21/06

WELL 18

RAW

COLLECTED 09/26/06

Report Details

Sample Number: CK53855

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	2.37	mg/l	JB	10/05/06 14:52
CALCIUM		200.7R4.4			1	108	mg/l	JB	10/05/06 14:52
MAGNESIUM		200.7R4.4			1	31	mg/l	JB	10/05/06 14:52
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	10/05/06 14:52
SODIUM		200.7R4.4	1052		1	100	mg/l	JB	10/05/06 14:52
SILICA		200.7R4.4			10	31	mg/l	JB	10/05/06 14:52
STRONTIUM		200.7R4.4			0.050	0.715	mg/l	JB	10/05/06 14:52

Analyte Count: 7

Sample Number: CK53855

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	10/04/06 12:59
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	10/04/06 12:59
ARSENIC		200.8R5.4	1005	0.010	0.001	0.651	mg/l	LG	10/04/06 12:59
BARIUM		200.8R5.4	1010	2	0.001	0.170	mg/l	LG	10/04/06 12:59
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	10/04/06 12:59
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	10/04/06 12:59
CHROMIUM		200.8R5.4	1020	0.1	0.007	ND	mg/l	LG	10/04/06 12:59
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	10/04/06 12:59
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	10/04/06 12:59
MANGANESE		200.8R5.4		0.05(s)	0.010	0.060	mg/l	LG	10/04/06 12:59
NICKEL		200.8R5.4	1036		0.0005	0.0064	mg/l	LG	10/04/06 12:59
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	10/04/06 12:59
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	10/04/06 12:59
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	10/04/06 12:59
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	10/04/06 12:59
BORON		200.8R5.4			0.050	0.168	mg/l	LG	10/04/06 12:59
COBALT		200.8R5.4			0.010	ND	mg/l	LG	10/04/06 12:59
MOLYBDENUM		200.8R5.4			0.001	0.013	mg/l	LG	10/04/06 12:59
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	10/04/06 12:59

Analyte Count: 19

Sample Number: CK53855

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/29/06 14:27

Analyte Count: 1

200



IN



Starting Sample: CK53855  
Report Date: 10/06/06

WELL 19

RAW

COLLECTED 09/26/06

Report Details

Sample Number: CK53856

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	2.21	mg/l	JB	10/05/06 14:56
CALCIUM		200.7R4.4			1	83	mg/l	JB	10/05/06 14:56
MAGNESIUM		200.7R4.4			1	26	mg/l	JB	10/05/06 14:56
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	10/05/06 14:56
SODIUM		200.7R4.4	1052		1	107	mg/l	JB	10/05/06 14:56
SILICA		200.7R4.4			10	30	mg/l	JB	10/05/06 14:56
STRONTIUM		200.7R4.4			0.050	0.674	mg/l	JB	10/05/06 14:56

Analyte Count: 7

Sample Number: CK53856

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	10/04/06 13:03
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	10/04/06 13:03
ARSENIC		200.8R5.4	1005	0.010	0.001	0.497	mg/l	LG	10/04/06 13:03
BARIUM		200.8R5.4	1010	2	0.001	0.193	mg/l	LG	10/04/06 13:03
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	10/04/06 13:03
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	10/04/06 13:03
CHROMIUM		200.8R5.4	1020	0.1	0.007	ND	mg/l	LG	10/04/06 13:03
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	10/04/06 13:03
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	10/04/06 13:03
MANGANESE		200.8R5.4		0.05(s)	0.010	0.027	mg/l	LG	10/04/06 13:03
NICKEL		200.8R5.4	1036		0.0005	0.0048	mg/l	LG	10/04/06 13:03
SELENIUM		200.8R5.4	1045	0.05	0.002	0.002	mg/l	LG	10/04/06 13:03
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	10/04/06 13:03
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	10/04/06 13:03
ZINC		200.8R5.4		5.0(s)	0.010	0.012	mg/l	LG	10/04/06 13:03
BORON		200.8R5.4			0.050	0.219	mg/l	LG	10/04/06 13:03
COBALT		200.8R5.4			0.010	ND	mg/l	LG	10/04/06 13:03
MOLYBDENUM		200.8R5.4			0.001	0.016	mg/l	LG	10/04/06 13:03
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	10/04/06 13:03

Analyte Count: 19

Sample Number: CK53856

Sample Status: REPORT QUEUE

	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/29/06 14:28

Analyte Count: 1

2006



IN

A

WELL 20

RAW

COLLECTED 09/26/06

Report Details

Sample Number: CK53857

Sample Status: REPORT QUEUE

ICP Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
IRON		200.7R4.4		0.3(s)	0.10	2.31	mg/l	JB	10/05/06 15:01
CALCIUM		200.7R4.4			1	117	mg/l	JB	10/05/06 15:01
MAGNESIUM		200.7R4.4			1	37	mg/l	JB	10/05/06 15:01
POTASSIUM		200.7R4.4			5	ND	mg/l	JB	10/05/06 15:01
SODIUM		200.7R4.4	1052		1	31	mg/l	JB	10/05/06 15:01
SILICA		200.7R4.4			10	18	mg/l	JB	10/05/06 15:01
STRONTIUM		200.7R4.4			0.050	0.640	mg/l	JB	10/05/06 15:01

Analyte Count: 7

Sample Number: CK53857

Sample Status: REPORT QUEUE

ICP/MS Metals	Qualifier Code	Analysis Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
ALUMINUM		200.8R5.4		0.2(s)	0.010	ND	mg/l	LG	10/04/06 13:08
ANTIMONY		200.8R5.4	1074	0.006	0.0004	ND	mg/l	LG	10/04/06 13:08
ARSENIC		200.8R5.4	1005	0.010	0.001	0.005	mg/l	LG	10/04/06 13:08
BARIUM		200.8R5.4	1010	2	0.001	0.274	mg/l	LG	10/04/06 13:08
BERYLLIUM		200.8R5.4	1075	0.004	0.0003	ND	mg/l	LG	10/04/06 13:08
CADMIUM		200.8R5.4	1015	0.005	0.001	ND	mg/l	LG	10/04/06 13:08
CHROMIUM		200.8R5.4	1020	0.1	0.007	ND	mg/l	LG	10/04/06 13:08
COPPER		200.8R5.4		1(S)	0.010	ND	mg/l	LG	10/04/06 13:08
LEAD		200.8R5.4		0.015	0.001	ND	mg/l	LG	10/04/06 13:08
MANGANESE		200.8R5.4		0.05(s)	0.010	0.090	mg/l	LG	10/04/06 13:08
NICKEL		200.8R5.4	1036		0.0005	0.0066	mg/l	LG	10/04/06 13:08
SELENIUM		200.8R5.4	1045	0.05	0.002	ND	mg/l	LG	10/04/06 13:08
SILVER		200.8R5.4		0.1(s)	0.010	ND	mg/l	LG	10/04/06 13:08
THALLIUM		200.8R5.4	1085	0.002	0.0003	ND	mg/l	LG	10/04/06 13:08
ZINC		200.8R5.4		5.0(s)	0.010	ND	mg/l	LG	10/04/06 13:08
BORON		200.8R5.4			0.050	0.130	mg/l	LG	10/04/06 13:08
COBALT		200.8R5.4			0.010	ND	mg/l	LG	10/04/06 13:08
MOLYBDENUM		200.8R5.4			0.001	0.008	mg/l	LG	10/04/06 13:08
VANADIUM		200.8R5.4			0.050	ND	mg/l	LG	10/04/06 13:08

Analyte Count: 19

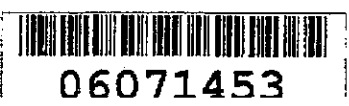
Sample Number: CK53857

Sample Status: REPORT QUEUE

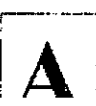
	Qualifier Code	Analysis Method	Prep Method	State Code	MCL	Reporting Limit	Result	Unit	Analyst	Analysis Date / Time
MERCURY		245.2	PRP7470	1035	0.002	0.0002	ND	mg/l	JB	09/29/06 14:30

Analyte Count: 1

2001



IN



Starting Sample: CK53857  
Report Date: 10/06/06  
Page 2 of 2

# **Appendix C**

**Indiana Department of Natural Resources - Record of Indiana-American  
Water (Kokomo) Water Wells**

**Indiana Department of Natural Resources Record of Water Wells are not-for-public-view documents and have been redacted from this document.**

# **Appendix D**

**Indiana Department of Natural Resources - Record of Nearby Water Wells**

**Indiana Department of Natural Resources Record of Water Wells are not-for-public-view documents and have been redacted from this document.**

# **Appendix E**

**ATSDR ToxFAQ – Vinyl Chloride**  
**ATSDR ToxFAQ – Arsenic**

This fact sheet answers the most frequently asked health questions (FAQs) about vinyl chloride. For more information, call the ATSDR Information Center at 1-888-422-8737. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

**HIGHLIGHTS:** Exposure to vinyl chloride occurs mainly in the workplace. Breathing high levels of vinyl chloride for short periods of time can cause dizziness, sleepiness, unconsciousness, and at extremely high levels can cause death. Breathing vinyl chloride for long periods of time can result in permanent liver damage, immune reactions, nerve damage, and liver cancer. This substance has been found in at least 616 of the 1,662 National Priority List sites identified by the Environmental Protection Agency (EPA).

### What is vinyl chloride?

Vinyl chloride is a colorless gas. It burns easily and it is not stable at high temperatures. It has a mild, sweet odor. It is a manufactured substance that does not occur naturally. It can be formed when other substances such as trichloroethane, trichloroethylene, and tetrachloroethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC). PVC is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Vinyl chloride is also known as chloroethene, chloroethylene, and ethylene monochloride.

### What happens to vinyl chloride when it enters the environment?

- Liquid vinyl chloride evaporates easily. Vinyl chloride in water or soil evaporates rapidly if it is near the surface.
- Vinyl chloride in the air breaks down in a few days to other substances, some of which can be harmful.
- Small amounts of vinyl chloride can dissolve in water.
- Vinyl chloride is unlikely to build up in plants or animals that you might eat.

### How might I be exposed to vinyl chloride?

- Breathing vinyl chloride that has been released from plastics industries, hazardous waste sites, and landfills.
- Breathing vinyl chloride in air or during contact with your skin or eyes in the workplace.
- Drinking water from contaminated wells.

### How can vinyl chloride affect my health?

Breathing high levels of vinyl chloride can cause you to feel dizzy or sleepy. Breathing very high levels can cause you to pass out, and breathing extremely high levels can cause death.

Some people who have breathed vinyl chloride for several years have changes in the structure of their livers. People are more likely to develop these changes if they breathe high levels of vinyl chloride. Some people who work with vinyl chloride have nerve damage and develop immune reactions. The lowest levels that produce liver changes, nerve damage, and immune reaction in people are not known. Some workers exposed to very high levels of vinyl chloride have problems with the blood flow in their hands. Their fingers turn white and hurt when they go into the cold.

ToxFAQs™ Internet address is <http://www.atsdr.cdc.gov/toxfaq.html>

The effects of drinking high levels of vinyl chloride are unknown. If you spill vinyl chloride on your skin, it will cause numbness, redness, and blisters.

Animal studies have shown that long-term exposure to vinyl chloride can damage the sperm and testes.

#### **How likely is vinyl chloride to cause cancer?**

The U.S. Department of Health and Human Services has determined that vinyl chloride is a known carcinogen. Studies in workers who have breathed vinyl chloride over many years showed an increased risk of liver, brain, lung cancer, and some cancers of the blood have also been observed in workers.

#### **How can vinyl chloride affect children?**

It has not been proven that vinyl chloride causes birth defects in humans, but studies in animals suggest that vinyl chloride might affect growth and development. Animal studies also suggest that infants and young children might be more susceptible than adults to vinyl chloride-induced cancer.

#### **How can families reduce the risk of exposure to vinyl chloride?**

Tobacco smoke contains low levels of vinyl chloride, so limiting your family's exposure to cigarette or cigar smoke may help reduce their exposure to vinyl chloride.

#### **Is there a medical test to show whether I've been exposed to vinyl chloride?**

The results of several tests can sometimes show if you have been exposed to vinyl chloride. Vinyl chloride can be measured in your breath, but the test must be done shortly after exposure. This is not helpful for measuring very low levels of vinyl chloride.

The amount of the major breakdown product of vinyl chloride, thiodiglycolic acid, in the urine may give some information about exposure. However, this test must be done shortly after exposure and does not reliably indicate the level of exposure.

#### **Has the federal government made recommendations to protect human health?**

Vinyl chloride is regulated in drinking water, food, and air. The EPA requires that the amount of vinyl chloride in drinking water not exceed 0.002 milligrams per liter (mg/L) of water.

The Occupational Safety and Health Administration (OSHA) has set a limit of 1 part vinyl chloride per 1 million parts of air (1 ppm) in the workplace.

The Food and Drug Administration (FDA) regulates the vinyl chloride content of various plastics. These include plastics that carry liquids and plastics that contact food. The limits for vinyl chloride content vary depending on the nature of the plastic and its use.

#### **Reference**

Agency for Toxic Substances and Disease Registry (ATSDR). 2006. Toxicological Profile for Vinyl Chloride (Update). Atlanta, GA: U.S. Department of Health and Human Services, Public Health Service.

**Where can I get more information?** For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-888-422-8737, FAX: 770-488-4178. ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaq.html>. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



This fact sheet answers the most frequently asked health questions (FAQs) about arsenic. For more information, call the ATSDR Information Center at 1-800-232-4636. This fact sheet is one in a series of summaries about hazardous substances and their health effects. It is important you understand this information because this substance may harm you. The effects of exposure to any hazardous substance depend on the dose, the duration, how you are exposed, personal traits and habits, and whether other chemicals are present.

**HIGHLIGHTS:** Exposure to higher than average levels of arsenic occur mostly in the workplace, near hazardous waste sites, or in areas with high natural levels. At high levels, inorganic arsenic can cause death. Exposure to lower levels for a long time can cause a discoloration of the skin and the appearance of small corns or warts. Arsenic has been found in at least 1,149 of the 1,684 National Priority List sites identified by the Environmental Protection Agency (EPA).

### What is arsenic?

Arsenic is a naturally occurring element widely distributed in the earth's crust. In the environment, arsenic is combined with oxygen, chlorine, and sulfur to form inorganic arsenic compounds. Arsenic in animals and plants combines with carbon and hydrogen to form organic arsenic compounds.

Inorganic arsenic compounds are mainly used to preserve wood. Copper chromated arsenate (CCA) is used to make "pressure-treated" lumber. CCA is no longer used in the U.S. for residential uses; it is still used in industrial applications. Organic arsenic compounds are used as pesticides, primarily on cotton fields and orchards.

### What happens to arsenic when it enters the environment?

- Arsenic occurs naturally in soil and minerals and may enter the air, water, and land from wind-blown dust and may get into water from runoff and leaching.
- Arsenic cannot be destroyed in the environment. It can only change its form.
- Rain and snow remove arsenic dust particles from the air.
- Many common arsenic compounds can dissolve in water. Most of the arsenic in water will ultimately end up in soil or sediment.
- Fish and shellfish can accumulate arsenic; most of this arsenic is in an organic form called arsenobetaine that is much less harmful.

### How might I be exposed to arsenic?

- Ingesting small amounts present in your food and water or breathing air containing arsenic.
- Breathing sawdust or burning smoke from wood treated with arsenic.
- Living in areas with unusually high natural levels of arsenic in rock.
- Working in a job that involves arsenic production or use, such as copper or lead smelting, wood treating, or pesticide application.

### How can arsenic affect my health?

Breathing high levels of inorganic arsenic can give you a sore throat or irritated lungs.

Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of "pins and needles" in hands and feet.

Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso.

Skin contact with inorganic arsenic may cause redness and swelling.

ToxFAQs™ Internet address is <http://www.atsdr.cdc.gov/toxfaq.html>

Almost nothing is known regarding health effects of organic arsenic compounds in humans. Studies in animals show that some simple organic arsenic compounds are less toxic than inorganic forms. Ingestion of methyl and dimethyl compounds can cause diarrhea and damage to the kidneys

### How likely is arsenic to cause cancer?

Several studies have shown that ingestion of inorganic arsenic can increase the risk of skin cancer and cancer in the liver, bladder, and lungs. Inhalation of inorganic arsenic can cause increased risk of lung cancer. The Department of Health and Human Services (DHHS) and the EPA have determined that inorganic arsenic is a known human carcinogen. The International Agency for Research on Cancer (IARC) has determined that inorganic arsenic is carcinogenic to humans.

### How can arsenic affect children?

There is some evidence that long-term exposure to arsenic in children may result in lower IQ scores. There is also some evidence that exposure to arsenic in the womb and early childhood may increase mortality in young adults.

There is some evidence that inhaled or ingested arsenic can injure pregnant women or their unborn babies, although the studies are not definitive. Studies in animals show that large doses of arsenic that cause illness in pregnant females, can also cause low birth weight, fetal malformations, and even fetal death. Arsenic can cross the placenta and has been found in fetal tissues. Arsenic is found at low levels in breast milk.

### How can families reduce the risks of exposure to arsenic?

If you use arsenic-treated wood in home projects, you should wear dust masks, gloves, and protective clothing to decrease exposure to sawdust.

- If you live in an area with high levels of arsenic in water or soil, you should use cleaner sources of water and limit contact with soil.
- If you work in a job that may expose you to arsenic, be aware that you may carry arsenic home on your clothing, skin, hair, or tools. Be sure to shower and change clothes before going home.

### Is there a medical test to determine whether I've been exposed to arsenic?

There are tests available to measure arsenic in your blood, urine, hair, and fingernails. The urine test is the most reliable test for arsenic exposure within the last few days. Tests on hair and fingernails can measure exposure to high levels of arsenic over the past 6-12 months. These tests can determine if you have been exposed to above-average levels of arsenic. They cannot predict whether the arsenic levels in your body will affect your health.

### Has the federal government made recommendations to protect human health?

The EPA has set limits on the amount of arsenic that industrial sources can release to the environment and has restricted or cancelled many of the uses of arsenic in pesticides. EPA has set a limit of 0.01 parts per million (ppm) for arsenic in drinking water.

The Occupational Safety and Health Administration (OSHA) has set a permissible exposure limit (PEL) of 10 micrograms of arsenic per cubic meter of workplace air (10  $\mu\text{g}/\text{m}^3$ ) for 8 hour shifts and 40 hour work weeks.

### References

Agency for Toxic Substances and Disease Registry (ATSDR). 2007. Toxicological Profile for Arsenic (Update). Atlanta, GA: U.S. Department of Public Health and Human Services, Public Health Service.

**Where can I get more information?** For more information, contact the Agency for Toxic Substances and Disease Registry, Division of Toxicology and Environmental Medicine, 1600 Clifton Road NE, Mailstop F-32, Atlanta, GA 30333. Phone: 1-800-232-4636, FAX: 770-488-4178. ToxFAQs Internet address via WWW is <http://www.atsdr.cdc.gov/toxfaq.html>. ATSDR can tell you where to find occupational and environmental health clinics. Their specialists can recognize, evaluate, and treat illnesses resulting from exposure to hazardous substances. You can also contact your community or state health or environmental quality department if you have any more questions or concerns.



# **Appendix F**

**Indiana Department of Natural Resources – Sensitive Environments**

**Indiana Department of Natural Resources Sensitive Environments information are not-for-public-view documents and have been redacted from this document.**

# **Appendix G**

## **2010 Indiana Fish Consumption Advisory**

## 2010 Indiana Fish Consumption Advisory

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## 2010 Indiana Fish Advisory

### Background

We have prepared this booklet to support fishermen and those who like to eat fish by providing helpful information to make healthy choices. Fishing and eating fish from Indiana waterways can be safe and fun if you follow the suggestions on the following pages. In addition to describing healthy eating of sport-caught fish, interest has increased over the years about consuming commercial and farm-raised fish. We have, therefore, included information in the Advisory.

The Indiana State Department of Health (ISDH), Indiana Department of Natural Resources (DNR), and the Indiana Department of Environmental Management (IDEM), with support from Purdue University, collaborate to produce this annual *Indiana Fish Consumption Advisory*.

The Advisory is based on the statewide collection and analysis of fish samples for long-lasting contaminants found in fish tissue, such as polychlorinated biphenyls (PCBs), pesticides, and/or heavy metals (e.g., mercury). Samples were taken from fish that feed at all depths of the water, predatory and bottom-feeding.

Well over 200 Indiana water bodies have been tested for fish contaminants through the years. Because testing is expensive, the focus of samples generally is to:

- ♦ Check water with known or suspected pollution sources
- ♦ Check lakes susceptible to mercury contamination
- ♦ Check waters where long-term contaminant trends are tracked

Criteria for the 2009 *Indiana Fish Consumption Advisory* were developed from the Great Lakes Sport Fish Advisory Task Force.

We have strived to improve this booklet by including only the most important points about sport fishing and fish consumption, while also including commercial fish information. **We also removed most Group 2 fish from the tables, since the guidance of the Advisory states "that a person should assume any fish you catch is a Group 2..." if it is not specifically listed.**

### Using the Advisory

**It may not be legal to catch and keep all sizes of fish that we have included in this Advisory.**

Please refer to the DNR's Indiana Fishing Guide for information about the legal size limits and number of fish that can be caught based upon the species of fish. To obtain a copy of the Indiana Fishing Guide, log on to DNR's Web site at <http://www.in.gov/dnr/fishwild/2347.htm> or by calling 317.232.4080.

Carefully read the instructions below, since meal advice depends upon the species and size of fish.

1. Measure the fish from the tip of the nose to the end of the tail fin.
2. Find the table that includes your fishing site. Look for the symbol showing the type of contaminant and the size of the fish that you caught. If there is no listing for the size of fish, keep in mind that larger fish are likely to be as contaminated, or more, than any that were tested. If you do not find the species of fish in the Advisory, then assume that the fish is in a Group 2 advisory (one meal per week).
3. While fish may have been tested for more than one contaminant, the symbol listed for each fish indicates the contaminant of greatest concern.

## Guidelines to Reduce Your Risks

### Follow this guidance:

- ☞ **Use the groupings** in the Advisory to determine the number of fish meals you can eat in a week or month.
- ☞ **Assume that any fish you catch is a Group 2** if it is not listed or the site where you are fishing is not listed in the Advisory.
- ☞ **Eat smaller, less fatty fish** like pan fish (bluegill, perch, and crappie).
- ☞ **Remove fat near the skin of the fish prior to cooking and broil, bake, or grill fish** so the fat drips away.
- ☞ **Eat at least 2 servings (3-4 ounces/serving) of fish per week.**

Risk Comparisons Risk of Death		
Estimated Advisory Group	Level of Risk (chances out of 1,000)	Activity
Level 5	35-125	Smoking 1-2 packs of cigarettes per day
	7-30	Having 200 chest x-rays per year
	5-30	Eating one 10-oz. meal per week of Group 5 fish
	17	Driving a motor vehicle
Level 4	11-12	Eating one 8-oz meal per week of mixed Great Lakes salmonids at 1984 contaminant levels
Level 3	3-6	Eating one 8-oz meal per week of mixed Great Lakes salmonids at 1987 contaminant levels
Level 2	0.1-6	Breathing air in the U.S. urban areas at early 1980's contaminant levels
	3.5	Recreational boating
	1-2	Drinking one 12-oz. beer per day
	1.5	Recreational hunting
	0.014	Complications from an insect bite or sting

## **Health Risks & Benefits from Eating Sport & Commercial Fish**

### **General Health Risk**

Your risk of getting cancer from eating contaminated fish cannot be predicted with certainty. Currently, cancer affects about 1 out of every 4 people by the age of 70, primarily due to smoking, diet, and hereditary risk factors. Exposure to contaminants in fish you eat may not increase your cancer risk at all. If you follow this Advisory over your lifetime, you should be able to lower your exposure, thus reducing your cancer risk from contaminants in fish.

The American Heart Association (AHA) recommends two 6 ounce fish meals per fish to provide a diet high in protein and low in saturated fats when properly prepared. Many doctors suggest that eating fish each week is helpful in preventing heart disease. Almost all fish may provide health benefits, since fish often replaces a high-fat food in the diet.

Since fish species differ in diet, habitat, growth rate, and physiology, they build up contaminants in their bodies at different rates. Long-term effects of human exposure to PCBs and pesticides have not been fully determined by health experts. People who regularly eat sport fish, including women of childbearing age and children, are particularly susceptible to contaminants that build up in the body over time. Because contaminants may produce harmful effects when consumed over a period of time, the Indiana State Department of Health (ISDH) advises that intake of these fish be limited.

### **Contaminants in Fish**

Polychlorinated biphenyls (PCBs), pesticides, and mercury collect in the soil, water, sediment, and in microscopic animals. They build up in greater amounts in larger, older fish and in predatory fish (fish that eat other fish). Contaminants are not usually found in smaller panfish such as bluegill and crappie.

Once in a lake, mercury is changed into methylmercury by bacteria and other processes. Fish absorb methylmercury from their food and it is tightly bound to the fish's muscles. There is no method of cooking or cleaning fish that will reduce the mercury.

PCBs and pesticides tend to be stored in the fat of fish, especially fatty fish such as carp and catfish. Unlike mercury, cleaning and cooking a fish to remove fat will lower the amount of PCBs in a fish meal. Most of the fat is located near the skin of the fish.

Eating a boneless, skinless fillet, with the fat layer along the belly flap and the midpoint of the back removed, will limit the amount of fat consumed.

PCBs and methylmercury build up in your body over time. It may take months or years of regularly eating contaminated fish to accumulate levels that are a health concern. If you follow this Advisory, the amount of methylmercury you take into your body is safely eliminated over time. Larger amounts of methylmercury may harm your nervous system. An unborn child is especially at risk of mercury poisoning.

Men typically face fewer health risks following exposure to contaminants. However, animal studies have also shown that mercury can damage sperm, which could result in fertility problems.

The Advisory advice for PCBs is intended to protect children from developmental problems. PCBs also cause changes in human blood and in the liver and immune function of adults. The meal advice for PCB-contaminated fish is based on the developmental delays that have been measured in infants. It is difficult to say what other effects PCBs may have on anglers and their families, but PCBs cause cancer in laboratory animals and may cause cancer in humans.

## **Purchased Fish**

People often ask about the levels of contaminants in fish bought in stores or restaurants. The U.S. Food and Drug Administration (FDA) sets tolerance levels for contaminants to regulate the interstate sale of fish. Recently, the FDA and the U.S. Environmental Protection Agency (EPA) issued fish consumption advice for women (of childbearing age) and children about commonly eaten commercial fish species. The FDA/EPA advice recommends that up to 12 ounces of cooked G160fish that are low in mercury be eaten per week to gain the health benefits from fish and shellfish.

[http://www.epa.gov/fish advisories/advice/](http://www.epa.gov/fish%20advisories/advice/)

A fact sheet which gives detailed advice about consuming fish that is targeted at women and children can be seen at:

<http://fn.cfs.purdue.edu/fish4health/>

Because fish bought in a store or restaurant do not come with labels that tell you the contaminant levels or even where the fish came from, it is up to the consumer to ask about the source of the fish. In addition to checking the FDA/EPA advice, it is important to eat a variety of fish species to make certain that you benefit the most from fish.

The *Commercial Fish Consumption Table* shown in this booklet separates two types of canned tuna into different categories by the amount a person can eat. "Light" tuna is made from young fish, while "white" tuna like albacore comes from older fish that have higher levels of mercury. When choosing canned tuna, "light" tuna is lowest in mercury but is also lower in the "healthy" fats found in fish.

Fish sticks from the grocery, fast-food sandwiches, or restaurant-prepared fish most often come from pollock, which is low in mercury.

Recent studies have discussed the levels of contaminants in farm-raised salmon versus wild salmon. Wild salmon have been shown to have very low levels of contaminants. While farm-raised salmon are said to have "significantly" higher levels than wild salmon, these levels of contaminants are still NOT high enough to be of serious concern. Farm-raised salmon are actually slightly higher in "helpful" omega-3 fatty acids than wild salmon. There may be times when friends and family catch fish that you may want to eat. If there is no advice about how much you can eat, then assume it is a Group 2 (one meal per week). This means eating no more than 8 ounces (before cooking) in one week.

It is also likely that, at some point, you may eat more fish and shellfish in one week than you ordinarily would. There is little change in the level of methylmercury in that short period of time. Just lower the amount of fish that you eat over the next couple of weeks.

## **Advisory Groups**

The chart on page 6 (ADVISORY GROUPS FOR INDIANA FISH CONSUMPTION) explains the fish groupings used throughout this Advisory to help in choosing the amount and type of fish that are safe to eat. Additionally, a list of fish species affected by "mercury" on a statewide basis has also been added to this chart.

For certain waters, more or less restrictive advice is needed, because fish have been found to contain higher or lower levels of mercury or PCBs. Follow the advisory information for rivers, lakes and streams.

**Carp Advisory for all Indiana Rivers and Streams**

Because of the recent appearance of Asian carp in many waterways of the Great Lakes region (which includes Indiana), we will now change the carp listings to be known as "Common Carp". Generally, common carp are contaminated with PCBs. *Unless noted otherwise, carp in all Indiana rivers and streams fall under the following risk groups:*

Common Carp	15-20 inches	Group 3
	20-25 inches	Group 4
Common Carp	over 25 inches	Group 5

**Group 5 Waterways**

All fish from the following waters are in the Group 5 advisory due to the high levels of contaminants. **DO NOT EAT ANY FISH CAUGHT IN THESE WATERS:**

- Clear Creek, Monroe County
- Salt Creek, Downstream of Clear Creek in Monroe County and Lawrence County
- Pleasant Run Creek, Lawrence County
- Elliot Ditch, Tippecanoe County
- Wea Creek, Tippecanoe County
- Grand Calumet River/Indiana Harbor Canal, Lake County
- Kokomo Creek, Howard County from U.S. 31 to Wildcat Creek
- Wildcat Creek, Downstream of the Waterworks Dam in Kokomo through Howard and Carroll Counties
- Little Mississinewa River, Randolph County
- Little Sugar Creek/Walnut Fork, Montgomery County
- Sugar Creek, Montgomery County (I-74 to SR-32)
- Stony Creek, Hamilton County

Advisory Groups of the Indiana Fish Consumption Advisory	
Group 1	Unrestricted consumption. <b>One meal per week for women who are pregnant or breast-feeding, women who plan to have children, and children under the age of 15.</b>
Group 2	Limit to one meal per week (52 meals per year) for adult males and females. <b>One meal per month for women who are pregnant or breast-feeding, women who plan to have children, and children under the age of 15.</b>
Group 3	Limit to one meal per month (12 meals per year) for adult males and females. <b>Women who are pregnant or breast-feeding, women who plan to have children, and children under the age of 15 <u>do not eat.</u></b>
Group 4	Limit to one meal every 2 months (6 meals per year) for adult males and females. <b>Women who are pregnant or breast-feeding, women who plan to have children, and children under the age of 15 <u>do not eat.</u></b>
Group 5	<b>No consumption (DO NOT EAT).</b>

**IMPORTANT NOTE:** For more detailed information, especially for the sensitive population, please review the 2010 Safe Eating Guidelines for Selected Sport Fish from Most of Indiana's Inland Waters.

**Don't see your fish or site listed? Assume it is a Group 2  
(general population: 1 meal/week; women/children: 1 meal/month).**

Location	Species	Fish Size (inches)	Contaminant	Group
Whitewater River  (Greens Fork, Martindale Creek, Middle Fork, Nolands Fork, West Fork) Wayne, Fayette, Franklin, and Dearborn counties	Carp	16-25	<input type="checkbox"/> ○	2
		25+	<input type="checkbox"/> ○	3
	Channel Catfish	23+	<input type="checkbox"/>	3
	Golden Redhorse	Up to 13		1
	Longear Sunfish	Up to 5		1
	Northern Hogsucker	Up to 9		1
	Walleye	up to 13		1
	White Sucker	Up to 10		1
	<b>Wildcat Creek</b>	Bluegill	Up to 6	
Howard County (Upstream of the Waterworks Dam in Kokomo)	Common Carp	Up to 19	<input type="checkbox"/>	2
		19+	<input type="checkbox"/>	3
	Longear Sunfish	Up to 5		1
	Rock Bass	Up to 7		1
	Spotted Sucker	up to 13		1
	Walleye	up to 11		1
	<b>All Species</b>	<b>ALL</b>	<input type="checkbox"/>	<b>5</b>
Howard County (Downstream of the Waterworks Dam in Kokomo)	<b>All Species</b>	<b>ALL</b>	<input type="checkbox"/>	<b>5</b>
Carroll County	<i>Consumption of fish from the Wildcat Creek in Tippecanoe County should be limited to no more than one meal every two months or six meals per year (Group 4) by the general population and NO CONSUMPTION by the sensitive population. Exceptions to this advice for the general population are:</i>			
Tippecanoe County	<b>Common Carp</b>	<b>ALL</b>	<input type="checkbox"/>	<b>5</b>
	Channel Catfish	14+	<input type="checkbox"/>	4
	Flathead Catfish	14+	<input type="checkbox"/>	4
	Redhorse species	15+	<input type="checkbox"/>	4
	River Carpsucker	16+	<input type="checkbox"/>	4
	Creek Chub	Up to 5		1
<b>Wilson Ditch</b>				
Miami County	Northern Hogsucker	10+	<input type="checkbox"/>	3

General Population      ○ = Mercury      □ = PCBs  
 Group 1 = Unlimited meals    Group 2 = 1 meal/week    Group 3 = 1 meal/month  
 Group 4 = 1 meal/2 months    Group 5 = DO NOT EAT  
 (For women and children, please refer to the Guidelines on Page 7.)

**Don't see your fish or site listed? Assume it is a Group 2  
(general population: 1 meal/week; women/children: 1 meal/month).**

Location	Species	Fish Size (inches)	Contaminant	Group
<b>Kankakee River (Cont.)</b>				
LaPorte/Lake/Newton	<b>Smallmouth</b>	22-28	<input type="checkbox"/>	3
	<b>Buffalo</b>	28-32	<input type="checkbox"/>	4
		32+	<input type="checkbox"/>	5
	White Crappie	Up to 9		1
<b>Killbuck Creek</b>				
Madison County	Carp	Up to 25	<input type="checkbox"/>	2
		25+	<input type="checkbox"/>	3
	Black Crappie	Up to 10		1
	Bluegill	Up to 7		1
	Rock Bass	Up to 8		1
	Smallmouth Bass	Up to 13		1
	Yellow Bullhead	Up to 10		1
<b>Kilmore Creek</b>				
Clinton County	Carp	Up to 12		1
	Creek Chub	Up to 7		1
<b>Kokomo Creek</b>				
Howard County	<b>ALL SPECIES</b>	<b>ALL</b>	<input type="checkbox"/>	<b>5</b>
<b>Laughery Creek</b>				
Dearborn/Ohio Counties	Carp	All	<input type="checkbox"/> <input type="checkbox"/>	2
Dearborn County	White Crappie	Up to 10		1
<b>Little Blue River (Ohio River Basin)</b>				
Crawford County	Bluegill	Up to 7		1
	Carp	Up to 23		1
	Channel Catfish	16+	<input type="checkbox"/>	3
	Freshwater Drum	18+	<input type="checkbox"/>	3
	Largemouth Bass	Up to 10		1
		18+	<input type="checkbox"/>	3
	Sauger	14+	<input type="checkbox"/>	3
	White Crappie	Up to 9		1

General Population       = Mercury       = PCBs  
 Group 1 = Unlimited meals    Group 2 = 1 meal/week    Group 3 = 1 meal/month  
 Group 4 = 1 meal/2 months    Group 5 = DO NOT EAT

(For women and children, please refer to the Guidelines on Page 7.)

# Kokomo Tribune; Kokomo, Indiana

July 1, 2010

## Most fish in area lakes, streams and rivers are not safe to eat

By **MIKE FLETCHER**  
Tribune staff writer

Kokomo — With rod and reel in hand, Steve Cooney waded into the fast-moving water on the Wildcat Creek, just west of the Kokomo Reservoir Dam near 400 East, in search of that big catch.

Not long after, he landed a nice walleye.

Fortunately for Cooney, the walleye here are safe to eat.

But that's not the case with many waterways around Indiana as contaminants have made eating the fish a risky endeavor.

Asked if he was concerned with the eating restrictions, Cooney said "nope."

"I'll put some in the freezer for later and sometimes I just catch and release," said Cooney.

"I come out here a couple times a week," he said. "I live in Danville and work here during the week. [The water is] a little high right now, but it's a really good time."

While most of the area reservoirs are classified as group 1, which means there is no recommended consumption limit, there are other areas in which any fish caught should not be consumed.

Every year the Indiana Department of Natural Resources issues a Fish Consumption Advisory to inform anglers where it's safe to eat the fish.

The warnings didn't deter Michael Burton or Bryan Bowley, as they fished the waters below the dam.

"We caught a couple of small bluegills so far," said Burton.

"We come out here once or twice a week — it's fun."

"The only thing I usually eat is crappie," said Bowley. "I like the taste of crappie."

Local angler John Martino said while people should pay attention to the warnings, there is still good fishing along the Wildcat Creek.

"Sure there are certain areas high in contaminants, like a major portion of our Wildcat Creek where no fish should be eaten," Martino said.

"But, in areas where fish are safe to eat, it is good for the lake or stream to have some of their residents removed."

The bottom line is: "Do not stop eating fresh-caught fish," he said.

According to Martino, the section of Wildcat Creek where no fish should be consumed begins at the low-head dam located several hundred yards west of U.S. 31. The dam can be seen by looking north from the Carter Street Bridge (Waterworks Road). From there, the group five fish consumption advisory is in effect all the way to the Wildcat's confluence with the Wabash River near Lafayette. It does not begin, as many mistakenly think, at the Kokomo Reservoir dam on 400 East.

But, according to the DNR 2010 Fishing Consumption Guide, bluegill tested east of the Waterworks Dam also fell into group one under the advisory.

Fish consumption advisories are not intended to discourage people from eating all fish taken from Hoosier waters, it's only a guide to help choose what fish are low in contaminants.

Some fish absorb contaminants from the water, suspended sediments and their food. These pollutants then concentrate in the fatty tissue of the fish. Properly cleaning and cooking fish will lower the amount of contaminants. A good note is that two of the tastiest fish, bluegills and crappies, rarely absorb these types of pollutants, Martino said.

Martino said there are a number of people who fish the contaminated area of the Wildcat. He said that's fine, "as long as they are aware of the fish consumption advisory, and there are some people who aren't."

There are 12 waterways that fall into the state's group five designation. Martino said this shouldn't dissuade people from enjoying what he called a fantastic stretch of water.

"The Wildcat — all through Howard County — is phenomenal fishing," he said. "The contaminated areas are the perfect place to practice catch and release. There's no reason to stop fishing it."

Steve Carson and his grandson, Conner Leight, agree.

The pair landed a nice size walleye below the dam Thursday and were hoping for more.

"We got one nice one and we've only been here for 15 minutes," Carson said.

"We were out here yesterday and caught three nice walleyes and eating-size channels [catfish]," he said. "The day before we caught five walleyes — one was about 22 inches long."

Along with the thrill of the catch, Carson also enjoys eating his tasty catches.

"Oh yeah, the walleye are good to eat," he said. "I really don't like the channels. I'll eat the crappies. But, I don't take a lot out of here.

"I like to get out here in June or late May right after they spawn," he continued. "It's really nice out here as long as people would just pick up their trash. I hate seeing all the trash out here."

• Mike Fletcher is the Kokomo Tribune crime and general reporter. He can be reached at 765-454-8565 or [mike.fletcher@kokomotribune.com](mailto:mike.fletcher@kokomotribune.com).

# **Appendix H**

## **INAWC – Kokomo Phase II Wellhead Protection Plan Potential Contaminant Sources**

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential	Agency Databases														Permit Number	Potential Contaminants	Site Description	Operating Status	Land Use		
	Name	Street Address	City	Zip Code	Contact	Phone Number		Time-of-Travel Zone (Years)	Hazard Potential Priority Rating	NPDDES (A)	RCRA Notifier (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Storers (E)	Fertilizer Registrator (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SAHA Title III / Hazardous Materials Storage (J)	Land Application (K)	CERCLA (Superfund, NPL sites) (L)						Prevention Program (M)	Toxic Release System (N)
PCS-1	Kokomo Memorial Park Cemetery	1300 E North Street	Kokomo	46901	Craig Wright	765-452-5078	5 M								X									(G) Facility ID 12799	Gasoline, Pathogens, Lawn Maintenance Chemicals	One tank registered as permanently out of service	A	P
PCS-2	Milbank Mfg. Co. Inc.	1400 E Havens St.	Kokomo	46901	N/A	N/A	5 L		X															(B) INDO06052930	Solvents, Lubricant and Cutting oils, Degreasers	Industrial site	A	C
PCS-3	Specialty Tool and Die	1614 Rank Parkway Court	Kokomo	46901	N/A	N/A	5 L																	N/A	Solvents, Lubricant and Cutting oils, Degreasers	Industrial site	A	C
PCS-4	Motion Industries	1619 Rank Parkway Court	Kokomo	46901	N/A	N/A	5 L																	N/A	Unknown	Industrial site	A	C
PCS-5	Brambles Equipment Services	1613 Rank Parkway	Kokomo	46901	N/A	N/A	5 L																	N/A	Unknown	None	A	C
PCS-6	Stor-R (formerly ICD Storage)	1050 Rank Parkway	Kokomo	46901	N/A	N/A	5 L																	N/A	Various	None	A	C
PCS-7	Coan Engineering Transmissions	1802 Havens	Kokomo	46901	N/A	N/A	5 M																	N/A	Solvents, Lubricant and Degreasers, Paint	Industrial site	A	C
PCS-8	Transit Mix Gravel Pit	Havens Street	Kokomo	46901	N/A	N/A	5 M																	N/A	Petroleum Products	AST observed	A	C
PCS-9	Coopers Delivery Service	1609 Rank Parkway	Kokomo	46901	N/A	N/A	5 M							X										(G) Facility ID 3563, 16500	Gasoline	Two tanks registered; one has been removed, the other is in service	A	C

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential		Agency Databases														Operating Status	Land Use					
	Name	Street Address	City	Zip Code	Contact	Phone Number	Time of Travel Zone (years)	Hazard Potential Priority Rating	NPDES (A)	RCRA Notice (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Storage (E)	Fertilizer Registrant (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SPARA Title III Hazardous Materials Storage (J)	Land Application (K)	CERCLA (Superfund, NPL sites) (L)	Prevention Program (M)	Toxic Release System (N)			Open Dump (O)	Voluntary Remediation Program (P)	Permit Number	Potential Contaminants	Site Description
PCS-10	Indy Tire (formerly Fouts Tire)	1714 E Havens St	Kokomo	46901	N/A	N/A	5	H							X	X									(G) Facility ID 18569, 18591; (H) Site # 9306549	Unknown	Two tanks registered; one kerosene and one gasoline, temporarily out of service.	A	C
PCS-11	Storage Facility	SR 31	Kokomo	46901	N/A	N/A	5	L																	N/A	Various	Unknown materials stored. Cars in a grassy area.	A	C
PCS-12	Merritts Trucking	1025 Touby Pike	Kokomo	46901	N/A	N/A	5	L																	N/A	Petroleum Products	Bays for truck maintenance.	A	C
PCS-13	UPS	925 N. Touby Pike	Kokomo	46901	Joe Hollowly	765-452-0244	5	H	X					X	X										(B) 2NR000015208; (G) Facility ID 1705; (H) Site # 9106527, 9106552	Diesel, Gasoline, Used Oil	Six tanks registered; on gas tank in use, one removed and four permanently out of service.	A	C
PCS-14	Empty Industrial Building	815 N. Touby Pike	Kokomo	46901	N/A	N/A	5	H								X									(I) Record # 8510391	Unknown	Spill reported.	I	C
PCS-15	Former Gas Station	1902 Sycamore	Kokomo	46901	N/A	N/A	5	M																	N/A	Petroleum Products	Tank status unknown.	I	C
PCS-16	Machine Shop	Sycamore	Kokomo	46901	N/A	N/A	5	L																	N/A	Machine Shop	Unknown	U	C
PCS-17	Pedfields Auto Body	1919 Jefferson	Kokomo	46901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Auto body shop	A	C
PCS-18	CCX Trucking	1632 E. Jefferson Street	Kokomo	46901	Dan Moesta	765-868-0004	5	H						X	X										(G) Facility ID 8333; (H) Site # 9011507	Diesel	Two tanks registered; one has been removed, the other is permanently out of service.	A	C
PCS-19	Car Lot For Sale	SR 31	Kokomo	46901	N/A	N/A	5	L																	N/A	Petroleum Products	Possibly a former gas station	I	C

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Time of Term (years)	Hazard Potential	Priority	Rating	Agency Databases														Permit Number	Potential Contaminants	Site Description	Operating Status	Land Use
	Name	Street Address	City	Zip Code	Contact	Phone Number					NPDES (A)	RCRA Nonhler (B)	Soak Wastes Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Storage (E)	Fertilizer Registrant (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SARA Title III / Hazardous Materials Storage (J)	Land Application (K)	CERCLA (Superfund, NPL sites) (L)	Pretreatment Program (M)	Toxic Release System (N)					
PCS-20	Mittler Industrial Gases and Welding Supplies	860 Daniel Drive	Kokomo	46901	N/A	N/A	5	M																N/A	Propane, Welding Chemicals	Propane stored on-site	A	C	
PCS-21	Sunbelt Tool Rental (formerly Aggregate Tool Supplies)	850 Daniel Drive	Kokomo	46901	N/A	N/A	5	M																N/A	Petroleum Products	ASTs observed	A	C	
PCS-22	Central Waste Mgmt of Central IN	740 N. Ohio St	Kokomo	46903	N/A	765-459-8053	5	M		X	X			X										(B) INDO58106059, INDC87037941; (C) Registrant # 34-0004; (G) Facility ID 4059	Various Wastes	One gasoline tank registered; permanently out of service	A	C	
PCS-23	Name and Sons, Inc.	808 N Ohio St	Kokomo	46901	N/A	N/A	5	M																	Unknown	Unknown	U	R	
PCS-24	Bergman Concrete Construction	1600 Jefferson	Kokomo	46901	N/A	N/A	5	L																N/A	Unknown	Construction firm	A	C	
PCS-25	North American Van Lines	1824 SR 31	Kokomo	46801	N/A	N/A	5	L																N/A	Unknown	Truck bays, may be a warehouse	A	C	
PCS-26	Sims Auto	1627 E. Jefferson	Kokomo	46901	N/A	N/A	5	M																N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car bays are visible, may do car maintenance	A	C	
PCS-27	Shell Service Station	1640 E. Sycamore	Kokomo	46901	Gary Reinking	765-459-5718	1	H					X	X										(G&H) Facility ID 205	Gasoline	Three gasoline tanks registered; all in use	A	C	
PCS-28	McNeal's Haircare	N Ohio St.	Kokomo	46901	N/A	N/A	6	L																N/A	Perm Solutions, Dyes	Beauty shop	A	R	
PCS-29	Village Pantry	Ohio and Mulberry	Kokomo	46901	N/A	N/A	5	H					X	X										(G&H) Facility ID 7048	Petroleum Products	Gas station	A	R	

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential	Agency Databases														Permit Number	Potential Contaminants	Site Description	Operating Status	Land Use		
	Name	Street Address	City	Zip Code	Contact	Phone Number		Time of Travel Zone (years)	Hazard Potential Priority Rating	NPDES (A)	RCRA Notifier (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Storage (E)	Fertilizer Registrant (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SARA Title III / Hazardous Materials Storage (J)	Land Applicator (K)	CERCLA (Superfund, NPL sites) (L)						Prevention Program (M)	Toxic Release System (N)
PCS-30	Central Roofing System	1234 E. Sycamore St.	Kokomo	46901	Sharon Crawford	765-457-1229	5	M							X									(G) Facility ID 9212	Gasoline, Diesel	Two tanks registered; both permanently out of service. Martins Wrecker Svc.	A	R
PCS-31	Graves Sheet Metal Co., Inc.	1242 E. Sycamore	Kokomo	46901	Mark Graves	765-457-4487	5	M							X									(G) Facility ID 9046	Unknown	One gasoline tank registered; permanently out of service	A	R
PCS-32	Former Electric Company	1423 Mulberry	Kokomo	46901	N/A	N/A	5	L															N/A	PCBs	May have stored transformers which may have contained PCBs	I	R	
PCS-33	Gas America (formerly Red Barn Gas Station)	1641 E. Sycamore	Kokomo	46901	N/A	N/A	1	H							X	X								(G) Facility ID 2504; (H) Site # 8902087	Gasoline	Four gasoline tanks registered; all in use	A	C
PCS-34	Cycles Gear	SR 31	Kokomo	46901	N/A	N/A	1	M																N/A	Solvents, Paints, Waste Oils	AST observed. Possible repair, maintenance	A	C
PCS-35	Bullseye Boats and Guns	148 Creekside	Kokomo	46901	N/A	N/A	1	M																N/A	Fuels, Oils, Paints, Waxes, Treatment Chemicals	Possible repair, maintenance	A	C
PCS-36	Anderson Car Lot (formerly Texaco Station)	SR 31	Kokomo	46901	N/A	N/A	1	M																N/A	Petroleum Products, Solvents	According to Keith Fallon of the Howard County Solid Waste District, this used to be a "chop-shop" in which cars were repossessed and cut-up.	I	O
PCS-37	Fill Debris/Construction	SR 31	Kokomo	46901	N/A	N/A	1	H																N/A	Unknown	Appears to be filled with demolition and construction debris	U	O
PCS-38	Tuffy Muffler	SR 31	Kokomo	46901	N/A	N/A	5	M																N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential	Agency Databases														Potential Contaminants	Site Description	Operating Status	Land Use					
	Name	Street Address	City	Zip Code	Contact	Phone Number		Time-of-Traffic Zone (years)	Hazard Potential Priority Rating	NPDDES (A)	RCRA Notifier (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Stores (E)	Fertilizer Register (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SARA Title III Hazardous Materials Storage (J)	Land Application (K)	CECCLA (Superfund, HPL sites) (L)					Priluticement Program (M)	Toxic Release System (N)	Open Dump (O)	Voluntary Remediation Program (P)	
PCS-39	Verizon Wireless (formerly GTE Mobile)	SR 31	Kokomo	48901	N/A	N/A	5	L																		N/A	Petroleum Products, Used Oil, Auto Wastes	Possibly a former gas station	A	C
PCS-40	Priscilla's Exotic Lingerie (formerly Bud's Auto Repair)	SR 31	Kokomo	48901	N/A	N/A	5	M																		N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C
PCS-41	BP Gas Station (formerly Bigfoot Amoco)	1800 E. Markland	Kokomo	48901	N/A	N/A	5	H	X					X	X										(B) IND 884632850; (G&H) Facility ID 1035	Gasoline, Used Oil	Five tanks of gasoline and used oil registered; one permanently out of service	A	C	
PCS-42	Superior Auto	1812 Markland Ave.	Kokomo	48901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C	
PCS-43	Dollar Deals/Don Panco's/Creek's Pizzeria (formerly Pep Boys)	Markland Ave	Kokomo	48901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C	
PCS-44	Cash Land (formerly Auto Value)	1716 Markland Ave.	Kokomo	48901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C	
PCS-45	Midas	1706 Markland Ave.	Kokomo	48901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C	
PCS-46	Jiffy Lube	1701 Markland Ave.	Kokomo	48901	Mike Owstley	765-457-8353	6	M						X											(G) Facility ID 16440	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance. One used oil tank registered. Parking lot partially gravel as # tank removed or repaired.	A	C	

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential	Agency Databases														Potential Contaminants	Site Description	Operating Status	Land Use				
	Name	Street Address	City	Zip Code	Contact	Phone Number		Time-of-Triple Zone (years)	Hazard Potential Priority Rating	NPDES (N)	RCRA Nonhazard (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Storage (E)	Fertilizer Registrant (F)	Underground Storage Tank (E)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	Superfund III / Hazardous Materials Storage (J)	Land Application (K)	CERCLA (Superfund, NPL sites) (L)					Pre-treatment Program (M)	Toxic Release System (N)	Open Dump (O)	Voluntary Remediation Program (P)
PCS-47	Thrifty Muffler Service	1524 Markland Ave	Kokomo	46901	N/A	N/A	5	M																	N/A	Solvents, Paints, Waste Oils, Auto Wastes	Car repair and maintenance	A	C
PCS-48	Mervis Steel Co.	831 S. Ohio Street	Kokomo	46904	N/A	217-442-5300	5	M	X					X											(B) INDR64694501; (G) Facility ID 17134, 20652	Unknown	Former Old Know Building/Kalux Building. One tank registered; permanently out of service	A	C
PCS-49	Indiana-American Water Inc.	1700 E. Superior	Kokomo	46901	Ryan Smith	765-457-5583	1	H						X	X									(G) Facility ID 4068, (I) Record # 9403289	Unknown	Lagoons	A	C	
PCS-50	Crown Point Cemetery	1101 E. Sycamore St.	Kokomo	46901	C.K. Weaver	765-457-1791	5	M						X										(G) Facility ID 4956	Gasoline, Pathogens, Lawn Maint. Chemicals	One gasoline tank registered; in service	A	P	
PCS-51	PPG Industries (formerly -Esaco Aluminum/Plitico Eng. Systems)	1500 E. Murden	Kokomo	46903	N/A	N/A	5	H	X							X		X	X					(B) INDR0062618820; (J) Owner ID: 000288; (N) 46903PPGND1600 E; (P) 6951202	Unknown ?	Industrial site	A	C	
PCS-52	Markland Mall/Sears Store (formerly Howard County Goodyear)	US 31 - Markland Ave	Kokomo	46904	N/A	N/A	5	M	X															(B) INDR84825941	Solvents, paints, waste oils, automotive wastes	Car repair and maintenance	A	C	
PCS-53	Target (Formerly-K Mart 4014)	1805 Markland	Kokomo	46902	N/A	N/A	5	M						X										(G) Facility ID 5010	Unknown	One used oil tank registered; permanently out of service	U	C	
PCS-54	Dump Area	ST 31 & Carter	Kokomo	46901	N/A	N/A	1	M													X			(O) 34020411A	Various	Approximately 100 yards off of SR 31	I	R	
PCS-55	B & D Manufacturing	2100 Carter Street	Kokomo	46901	N/A	N/A	1	H																N/A	Unknown	Industrial site	A	R	

Potential Contaminant Sources for Garrison, Main Water Treatment Plant, and Peat Bogs Well Fields

Facility ID Number	General Facility Information						Hazard Potential	Agency Databases														Permit Number	Potential Contaminants	Site Description	Operating Status	Land Use		
	Name	Street Address	City	Zip Code	Contact	Phone Number		Time-of-Traffic Zone (years)	Hazard Potential Priority Rating	MPDES (A)	PCRA Number (B)	Solid Waste Facilities (C)	Class V Injection Wells (D)	Pesticide Users or Stores (E)	Fertilizer Registrant (F)	Underground Storage Tank (G)	Leaking Underground Storage Tank (H)	Pollution Spills (I)	SARA Title III / Hazardous Materials Storage (J)	Lead Application (K)	CERCLA (Superfund, NPL sites) (L)						Pre-treatment Program (M)	Toxic Release System (N)
PCS-56	Indiana-American Water Co. (lead application)	Carter Street	Kokomo	46901	N/A	N/A	1	H																(C) Permit No. 000410; (K) Permit # 000419	Listed on Biosolids database	According to Mr. Lettles, Indiana-American is no longer allowed to apply the waste to the sites on Carter Street	I	D
PCS-57	Woodland Estates	2178 N 250 East	Kokomo	46901	Dick Freeman	N/A	5	M	X															(A) IN0038784	On-site wastewater treatment system	Located due west of the Peat Bog Well Field. Proposed expansion of residential area in the WHIPA.	A	R
PCS-58	Fill Area	along Wildcat Creek	Kokomo	46901	N/A	N/A	1	H																N/A	Unknown	Disposal of glass processing waste.	I	P
PCS-59	Sam's Club	1917 E. Mariland Ave.	Kokomo	46901	N/A	N/A	5	M						X										(G) Facility ID 24610	Fuel, insecticides, Herbicides	Big box store	A	C
PCS-60	Carrie's Cleaners	1505 W. Sycamore	Kokomo	46901	N/A	N/A	5	M	X															(B) IN0584905950	Solvents, detergents	Dry cleaning services	A	C
PCS-61	Williams Quick Lube	1801 E. Mariland Ave.	Kokomo	46901	N/A	N/A	5	H						X	X									(G&H) Facility ID 1796	Used oil, solvents	Car repair and maintenance	A	C

# **Appendix I**

**Correspondence with Indiana-American Water (Kokomo) Staff**

## Office Memo

**To:** Kokomo Garrison and Main Water Treatment Wellfield File

**From:** Dan Chesterson

**Re:** Telephone Conversation with Jeff Robinson, Indiana-American Water (Kokomo)

**Date:** November 12, 2010

I spoke to Mr. Jeff Robinson of the Indiana-American Water (Kokomo) Company regarding the contamination in the Kokomo Garrison and Main Water Treatment Wellfield. Mr. Robinson stated that Kokomo is currently relying on the arsenic contaminated wells for their public water supply, and are treating the water to reduce the arsenic levels to 2 ppb. He said that he would send data for arsenic and vinyl chloride to me electronically in a .pdf format. He will also email me specific contact information for staff at the Kokomo water plant.

## Office Memo

**To:** Kokomo Garrison and Main Water Treatment Wellfield File

**From:** Dan Chesterson

**Re:** Site Visit

**Date:** November 22, 2010

I traveled to Kokomo on Monday, November 22, 2010, with Tim Johnson to meet with representatives of the Indiana-American Water Company (Kokomo) to discuss the Site Investigation program's preliminary assessment investigation. We were scheduled to meet at the main office at 10:30 with Mr. Kirk Kuroiwa, Mr. Michael Ward, and Mr. Ryan Smith.

Upon arrival, we were met by Mr. Kuroiwa and informed that the other gentlemen had been called into an urgent meeting. Mr. Kuroiwa met with us and we told him of our planned investigation. We gave him a copy of the completed Pre-CERCLIS Screening report and updated him on the next process in our investigation.

During the course of discussion, Mr. Kuroiwa agreed to provide us with additional information to assist in the investigation, specifically: a map showing which wells serve which areas of Kokomo; a detailed description of the current water treatment process; sampling data from an abandoned well (#7); and individual well data of arsenic sampling.

Specific points of discussion discussed were: cis-1,2-dichloroethylene has also been detected in raw water samples. The vinyl chloride has not been detected in finished water apparently due to the current treatment processes of aeration and mixing. Well B is not currently operating unless absolutely needed (due to age and mechanical issues). The Peat Bog wellfield to the northeast pumps to the Main Street water treatment facility (POE #1). Phillips Street wellfield pumps to own treatment station. Approximately 15% of the population probably does not receive water from the Main Plant. Wildcat Creek surface water is blended with water from the Main Plant ground water source. There are no current plans for drilling any new wells. Arsenic treatment consists of Tricon filters, ferric chloride coagulents and potassium permanganate as an oxidant (Mr. Kuroiwa will email a detailed description of treatment process). Pumps 20 and 21 run all the time and either 18 or 19 will also be running (usually 18). There was an abandoned well (#7) located at Carter and Ohio Streets that was high in arsenic also (Mr. Kuroiwa will try to get data to us from that well).

As we were finishing up our discussion, Mr. Smith arrived and we went over with him briefly what we had discussed.

Following the meeting we drove around Kokomo to look at well locations and at potential sources of contamination.

**From:** [Kirk.Kuroiwa@amwater.com](mailto:Kirk.Kuroiwa@amwater.com)  
**To:** [CHESTERSON, DANIEL](#)  
**Subject:** RE: Kokomo Garrison & Main Water Treatment Plant Wellfield  
**Date:** Monday, November 29, 2010 2:56:24 PM  
**Attachments:** [Kokomo wells Arsenic results.pdf](#)  
[Phillips St. Flow Map.pdf](#)

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The Tricon Groundwater Filter Plant is located at our Main Station and consists of the following:

Aeration

Ferric Chloride

Potassium Permanganate

Cationic polymer

Chlorine

Clarification

Anthracite filtration

The Philips St. flow map shows the percentage of water supplied by our north groundwater plant.

Kirk D. Kuroiwa  
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# PHILLIPS ST. PLANT SOURCE DISTRIBUTION

AVERAGE DAY CONDITIONS

