

LOCATION : KINGSBURY
DATE OF COLLECTION : 05/05/88
DATE OF SAMPLE RECEIPT : 05/05/88
DATE SAMPLE REPORTED : 05/09/88

REPORTED

MAY - 9 1988
MO

Indiana State Board of Health
Environmental Laboratory Division
- VOC's -

ANALYST : SK
UNITS OF CONC. : Liquid (ug/l) ppb
Solid (mg/Kg) ppm

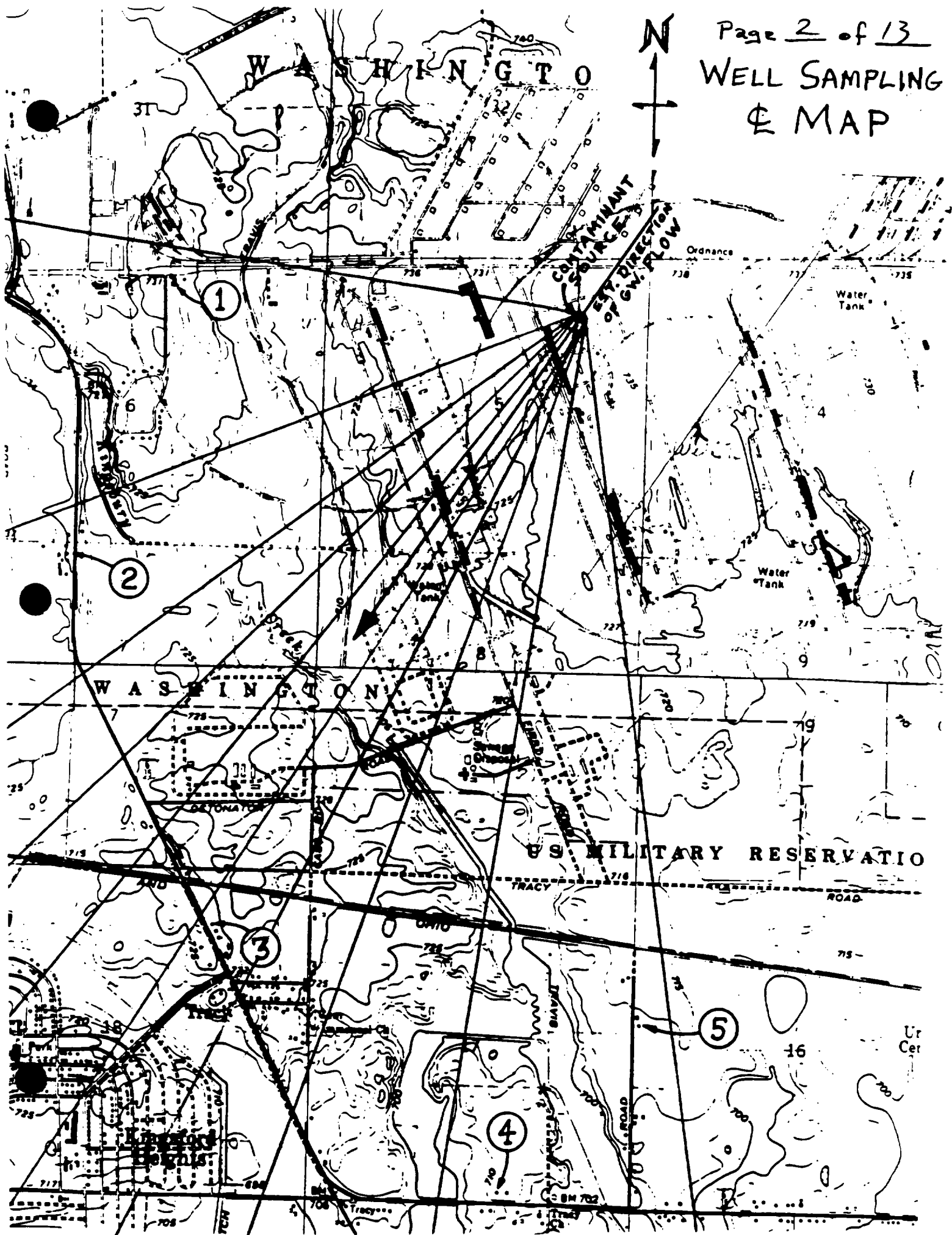
COMPOUND	D.L.	REPORTED LIQUID WELL	REPORTED LIQUID WELL	REPORTED LIQUID WELL	REPORTED LIQUID WELL
1,1 Dichloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,1 Dichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Chloroform	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Carbon Tetrachloride	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Dichloropropane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Trichloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,1,2 Trichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Dibromochloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Tetrachloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Chlorobenzene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Trichlorofluoroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
T- 1,2 Dichloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Dichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,1,1 Trichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Bromodichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
T- 1,3 Dichloropropene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
C- 1,3 Dichloropropene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Bromoform	1.0	< D.L.	< D.L.	< D.L.	< D.L.
1,1,2,2 Tetrachloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Methylene Chloride	5.0	< D.L.	< D.L.	< D.L.	< D.L.
Vinyl Chloride	4.0	N.A.	N.A.	N.A.	N.A.
1,4 Dichlorobenzene	1.0	N.A.	N.A.	N.A.	N.A.
Acetone	20.	< D.L.	< D.L.	< D.L.	< D.L.
Ethyl Ethyl Ketone	6.0	< D.L.	< D.L.	< D.L.	< D.L.
Ethyl Isobutyl Ketone	3.0	< D.L.	< D.L.	< D.L.	< D.L.
Benzene	1.0	< D.L.	< D.L.	< D.L.	< D.L.
Toluene	1.5	< D.L.	< D.L.	< D.L.	< D.L.
Ethyl Benzene	2.0	< D.L.	< D.L.	< D.L.	< D.L.
Total Xylene	9.0	< D.L.	< D.L.	< D.L.	< D.L.
Fuel Oil	100	N.A.	N.A.	N.A.	N.A.
Gasoline	20.	N.A.	N.A.	N.A.	N.A.
		cardinal chem.	Well B	Well E	blank

Note : D.L. = Detection Limit
N.A. = Not Analyzed

EPA Region 5 Records Ctr.



229781





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

April 18, 1988

Mr. Jim Cotton
Kingsbury Utility Corp.
P.O. Box 12
Kingsbury, IN 46345

Dear Mr. Cotton:

On March 10, 1988, Mr. James Nowacki of the Indiana Department of Environmental Management, Ground Water Section, collected a water sample from one of your wells (designated well A) for volatile organic chemical (VOC) analyses. The results of this analysis are enclosed. Please note that Trichloroethylene level is 21.0 micrograms per liter and 1,2 Dichloroethane level is 8.3 micrograms per liter. Both of these parameters exceed the maximum containment level of 5 micrograms per liter for each chemical as provided under the Safe Drinking Water Act. Studies have shown that a life time health risk exists in drinking water when contaminate levels exceed these established limits.

The above mentioned facts necessitate immediate action. We recommend that use of Well A be discontinued. Representatives of the IDEM ground water staff will be in contact with you soon to schedule confirmatory analyses for Well A in addition to initial testing of Wells B and E. We will keep you appraised of all analytical results. In the interim, your serious consideration must be given to reducing the concentration of these chemicals in the water that you serve your customers.

If you need further assistance or have any questions please feel free to contact Mr. Wayne K. Brattain of this office at 317-243-5099.

Very truly yours,

Arnold J. Viere, Chief
Public Water Supply Section

WKBrttain/lmb

cc: Ernest Burcham
Marty Risch ~
Jennifer Crooks

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: May 16, 1988

TO: Martin R. Risch

THRU:

FROM: James A. Nowacki

SUBJECT: Kingsbury Public Water Supply
Follow-Up Investigation

Field Report

On May 5, 1988, I sampled the two remaining water supply wells of Kingsbury Utility Corporation (KUC). Mr. Dan Menefee, the IDEM Site Manager for the Kingsbury Superfund site, collected parallel enforcement samples at the same time, at the same locations. We also sampled the finished water of the water main at the point of supply inside the Cardinal Chemical Corporation building.

Mr. Stevens, Superintendent of KUC, was very helpful and assisted our samplings. The former well "A", which was contaminated with TCE, is now being reworked by Layne Northern well service company. Dan and I spoke to Andy Mago, the Layne Northern service man. Only wells "B" and "E" remain to supply water. "B" is now the primary well, "E" is the backup. Water production is switched between these two wells to maintain aquifer water levels.

Several facts of this site need to be addressed by a ground water investigation. The primary potential source of the TCE is Fisher Calo, a Superfund site. The contamination plume from Fisher Calo flows southwest towards Travis Ditch. This known plume does not flow near well "A". The contaminants in well "A" probably are from a second, unknown plume. The nearest chemical operation to well "A" is Wallace Warehouses, as per Mr. Stevens. Well "A" is southwest of the Wallace chemical warehouse.

Well "B" is the eastern most well currently supplying KUC. Well "B" is surrounded by crop fields. There are no chemical companies as near to this well as to well "A".

Part of the WWII Kingsbury base is outside of the KUC service area. Northeast of well "B" is a group of 48 buildings used as factories and warehouses. KUC does not service all of these buildings. Many have their own wells. These warehouses have more than 25 employees and may be "non-community water supplies." A change in water production in well "B" may result in ground water flow changes which may introduce materials not found earlier into well "B". Detailed sampling of the northeastern corner of the WWII base will show if contaminants are in the aquifer. The area has not been sampled according to the LaPorte County Health Department. Such a sampling event is recommended, and will be planned.

Martin R. Risch
Page 2
May 16, 1988

Lab Results

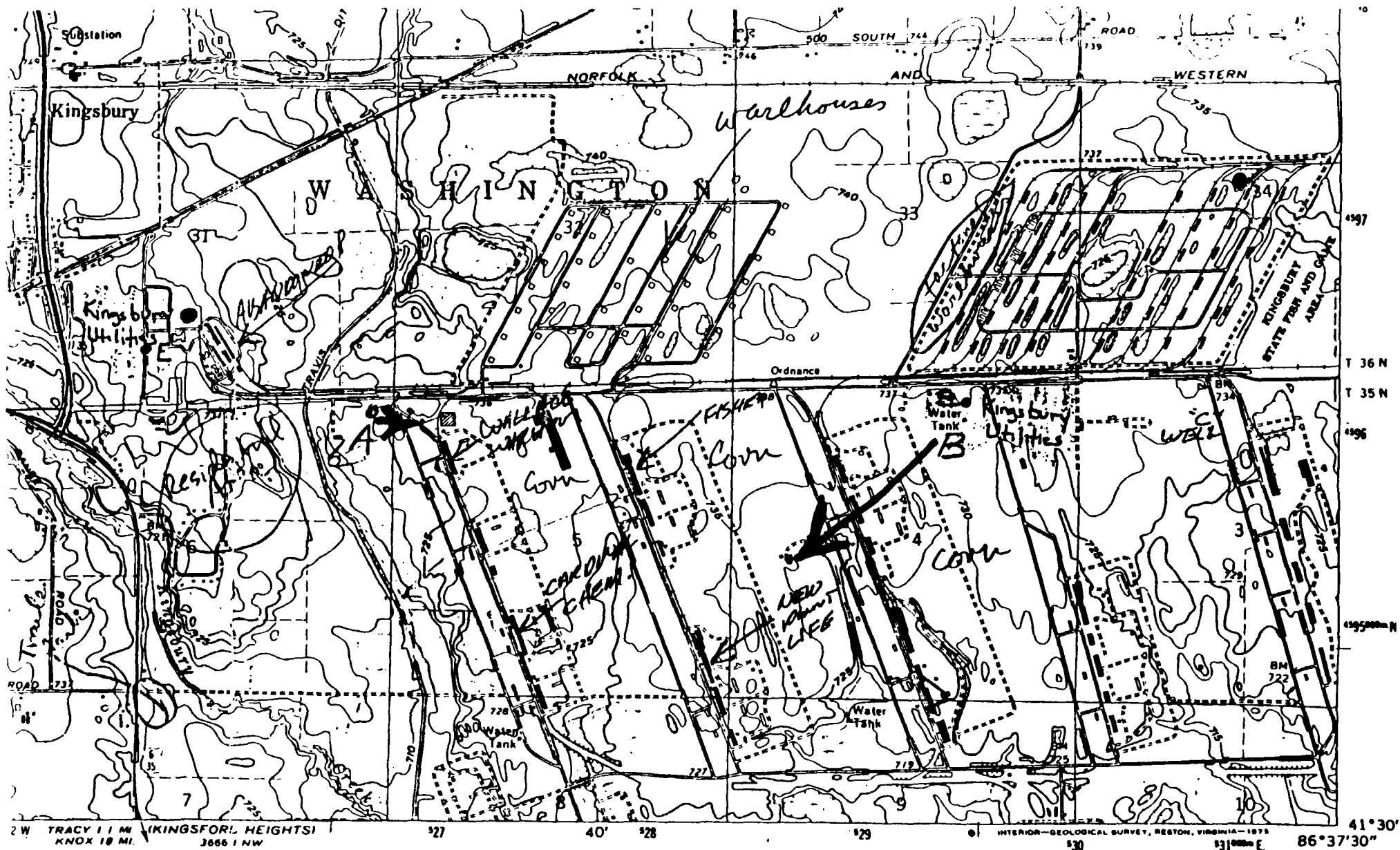
The ISBH lab reported VOC results on May 9, 1988. Metals and other organics were not reported. Well "B" contained 1.6 ppb TCE from an unknown source. This supports further sampling NE of this well. Well "E" contained no VOCs.

The distribution system sample at Cardinal Chemical contained 14 ppb TCE, 3.6 ppb 1,1,1-TCA, and 6 ppb Chloroform. Since contaminated well "A" was out of service at the time, the system could indicate either residual VOCs from use of well "A" 3 weeks ago, or possibly a cross connection problem.

JAN/em

Attachments

cc: Arnie Viere
Dan Menefee



COUNTY LAPORTE TWP. 35N RGE. 2W NE 1/4 NW 1/4 SW SEC 4 Subdivision Name LAYNE-NORTHERN

Topo Map LAPORTE EAST 7 1/2 _____ Ft W of EL. Ground Elevation 730

Field Located By Bruns Date 7-17-78 2200 Ft N of SL. Depth to bedrock _____ 9-11-41

Courthouse Location By _____ Date _____ 995 Ft E of WL. Bedrock elevation _____

Location accepted w/o verification by _____ _____ Ft S of NL. Aquifer elevation _____

[Handwritten notes and stamps are present on the right side of the page, including a large 'W' and 'D' stamp.]

2200 _____ Ft N of SL. Depth to bedrock _____ 9-11-41
 775 _____ Ft E of WL. Bedrock elevation _____
 _____ Ft S of NL. Aquifer elevation _____
portages taken from field map PKG

W W R S

WATER WELL LOG

[illegible]

WVRS

12" O.D. Casing

Concrete Seal

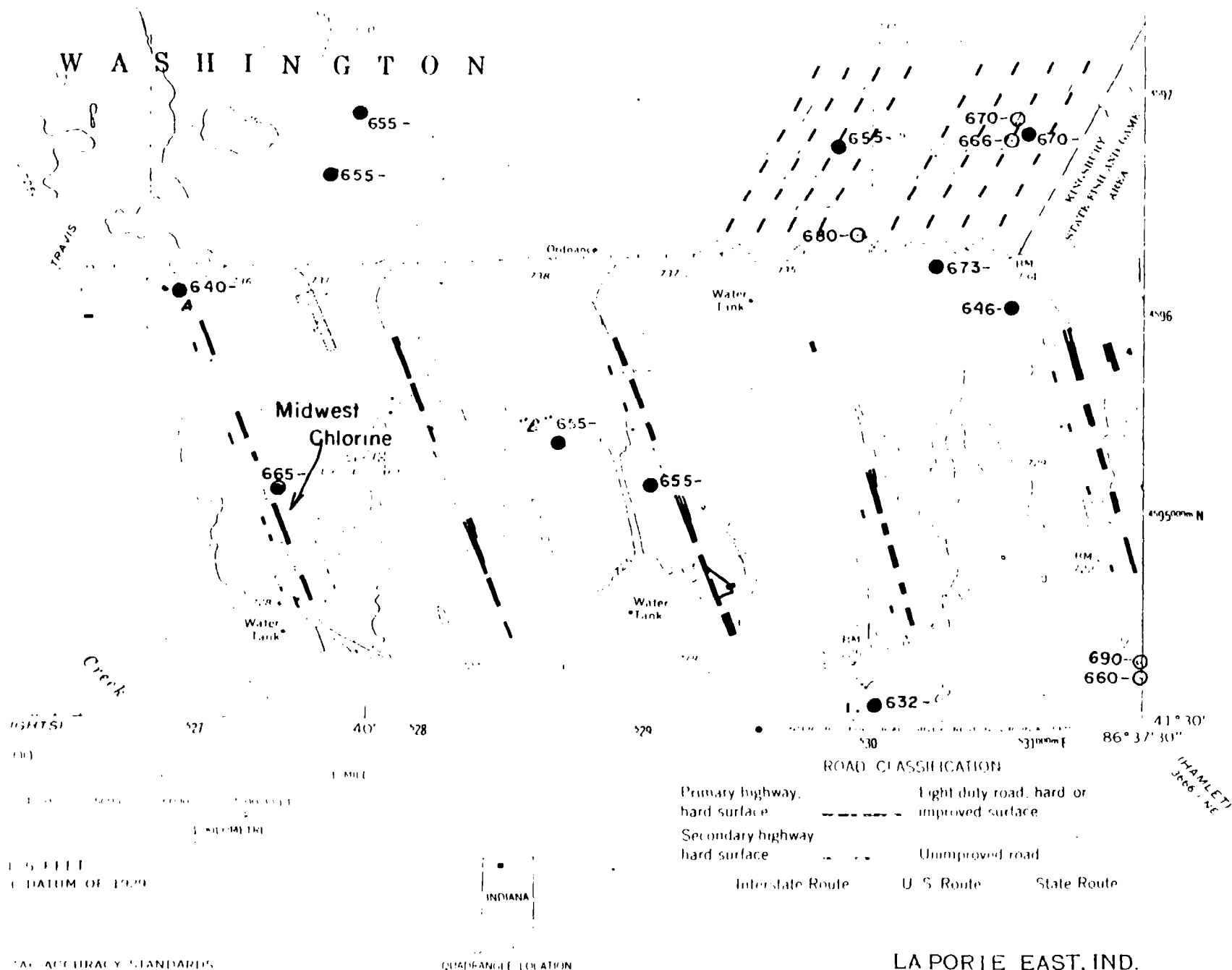
Gravel Wall of
Uniform Gravel

THIS DRAWING IS FOR
SINGLE CASE
FOR

B

SPC 25

WASHINGTON

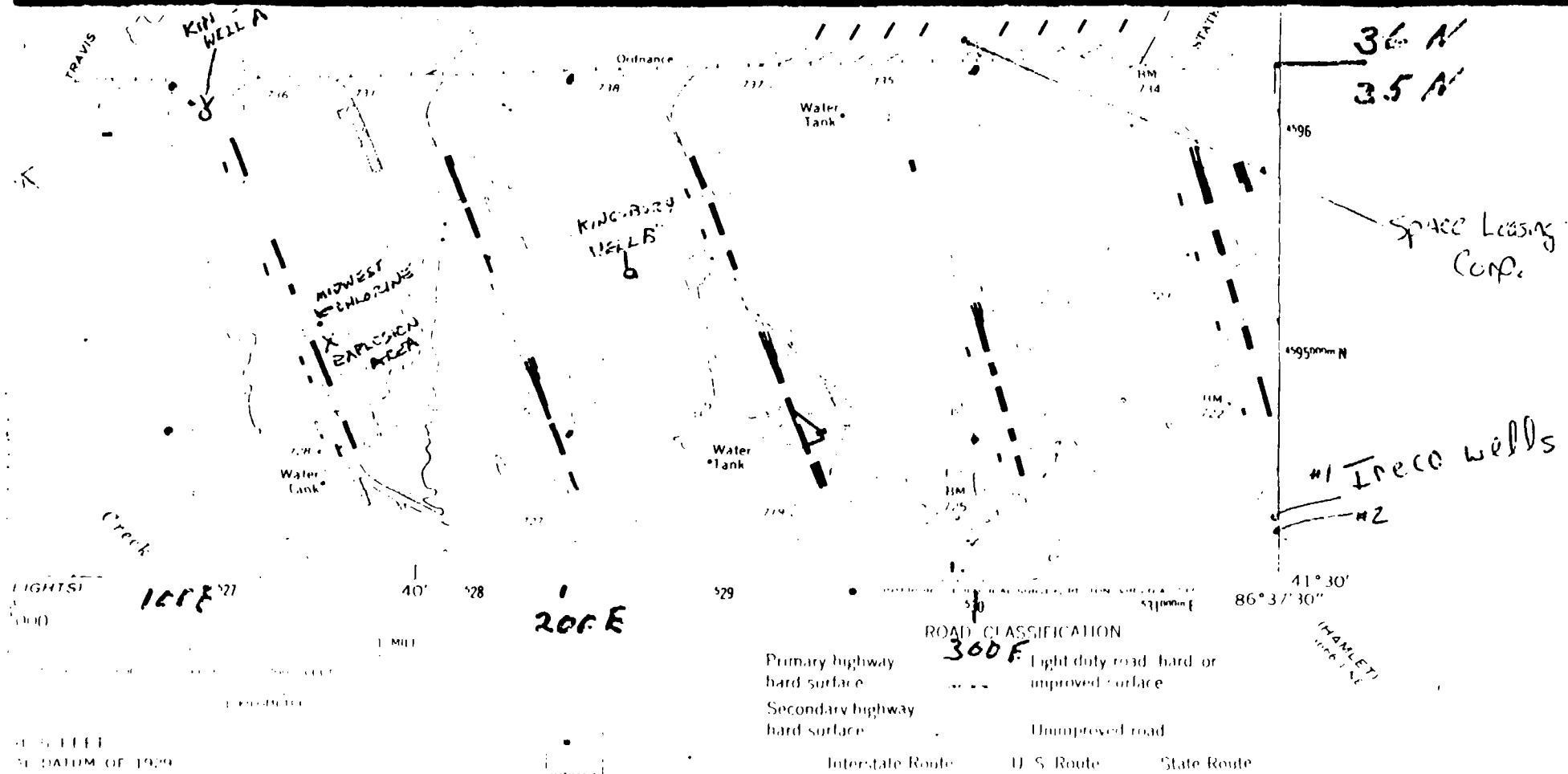


FOR ACCURACY STANDARDS
BY RISTON VIRGINIA 22092
CIRCLES, INDIANAPOLIS INDIANA 46204
SYMBOLS IS AVAILABLE ON REQUEST

LAPORTE EAST, IND.
N4130 W8637 5/7 5

1974

AMS 3667 II SW SERIES V851



MAP ACCURACY STANDARDS
BY RESTON, VIRGINIA, 2002
SOURCES: INDIANAPOLIS, INDIANA 46104
SYMBOLS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

TO: Fisher-Calo CERCLA File

DATE: June 13, 1988

THRU: Reggie Baker *RB 6/13*
Jackie Strecker *J 5/13*

FROM: Dan Menefee *DM 6-13*
Site Management Section

SUBJECT: Sampling of Kingsbury Industrial Park Water Supply

On May 5, 1988, I assisted James Nowacki (Ground Water Section) in collecting ground water samples from the Kingsbury Industrial Park. This effort was in response to earlier Ground Water Section sampling which revealed the presence of volatile organic chemical contamination in production well "A" (see attachment 1).

Sampling was planned for production wells "A", "B" and "E" and one sample collected from the distribution system as represented by Cardinal Chemical Corporation (see attachment 2 for a map of the sampling locations). Mr. Robert Stevens, manager of Kingsbury Industrial Park assisted in the sampling by operating the well pumps for 12 hours prior to sampling.

During discussions with Mr. Stevens, he indicated that he has denied U.S. EPA site access pursuant to the Fisher-Calo Phase II Remedial Investigation (RI). Without site access, the RI will be delayed. Mr. Stevens stated the denial was the result of U.S. EPA's failure to remove both the debris of the burned out Camp, Dresser and McKee trailer and drummed waste containing monitoring well purge water, well cuttings and protective clothing.

Samples were collected from all planned locations with the exception of well "A". Mr. Stevens informed us the well was being disassembled and cleaned by Layne Northern Well Service. After the samples were collected, they were delivered to EIS Laboratories (South Bend) and the Indiana State Board of Health. A 7 day turnaround time for the sample results was requested from EIS Laboratories.

DM/mg

cc: James Nowacki
Arnie Viere
Mike Sickels

HEALTH AND SAFETY PLAN FORM

CDM Health and Safety Program

This document is for the exclusive use of CDM and its subcontractors

CAMP DRESSER & MCKEE INC.

PROJECT DOCUMENT #: 209-R12-OP-FYFJ-



Study Areas

Fisher-Calo Chemical
Work Assignment Amendment
Section: 1
Revision No.: 0
Date: October 29, 1987
Page: 2 of 13

MW11

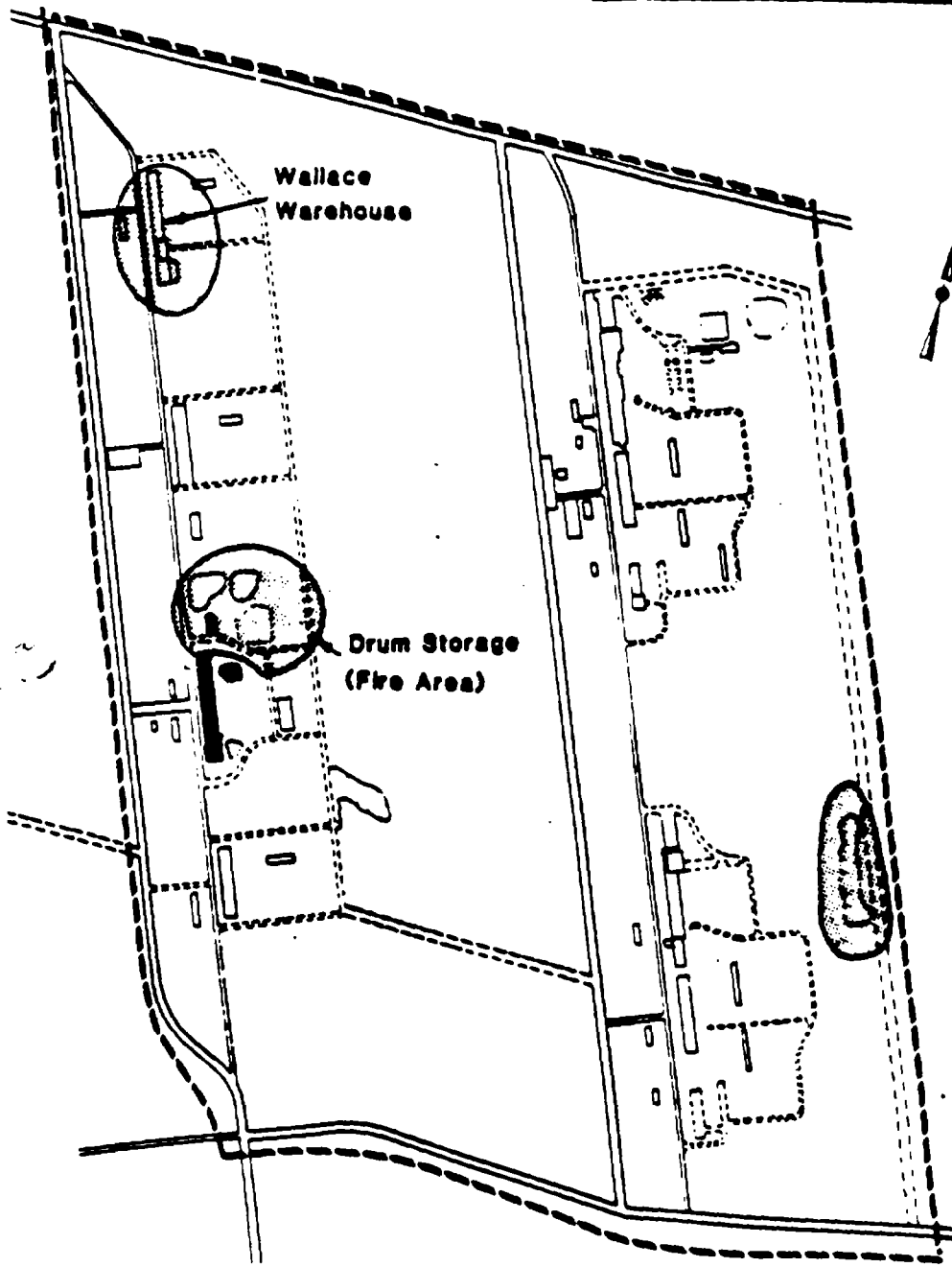


FIGURE 1-1
PHASE II STUDY AREAS

Fisher-Calo
Sampling & Analysis Plan
Section: 2
Revision No.: DRAFT
Date: January 15, 1988
Page: 2 of 16
REVISED 5-19-88 J.N.

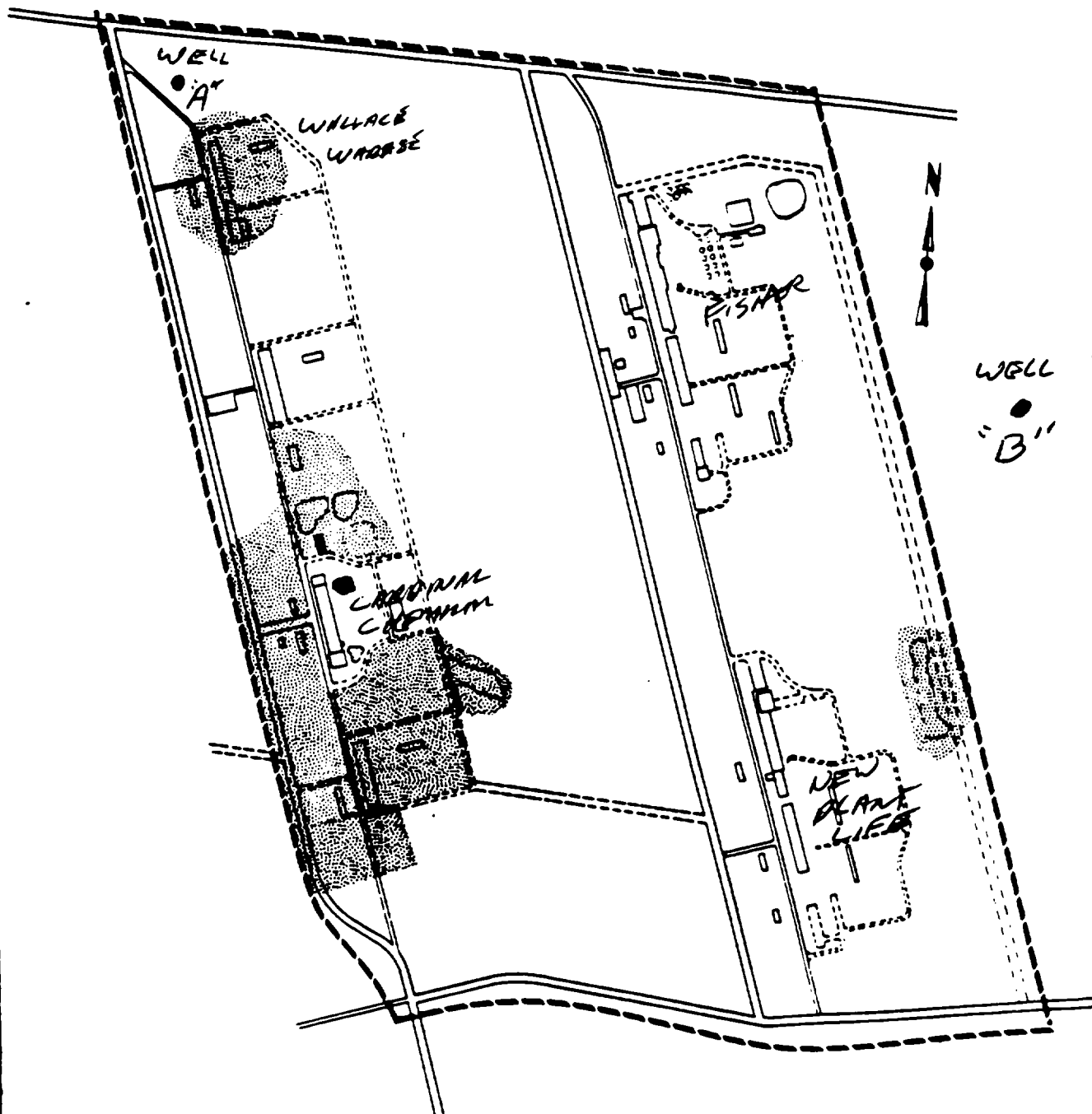


FIGURE 2-1
SUSPECTED DISPOSAL AREAS

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: March 29, 1988

TO: Arnold Viere
Public Water Supply Section

THRU: Martin Risch *MRR*

FROM: James Nowacki *JN*
Ground Water Section

SUBJECT:

We have received the results of laboratory analysis of a well water sample we obtained March 10, 1988, at the Kingsbury Utilities Public Water Supply. The sample was collected at the well head as part of the Indiana Pesticide Survey by IDEM and EPA. Analysis for pesticides and VOCs were performed by the ISBH lab.

Results indicated Well A, the only well sampled and in service at the time, contained 21 ug/l trichloroethylene and 8.3 ug/l 1,2-dichloroethane. (The MCL's for TCE and DCA are 5 ug/l.) It is recommended that the water utility be notified of the results and a confirmatory resampling be scheduled. Other wells at the supply should also be sampled if they are to be used in place of well A.

The utility has two other wells, B & E, which are usually rotated into service along with well A, one every three months. The water plant operator reported well A had been used two months in a row when we sampled, due to servicing of the other wells. The three wells are about a half-mile apart.

Kingsbury Utilities well A is within a mile or less of the Fisher Calo Superfund site where ground water contamination with VOC's is documented. It is not known whether the two situations are related.

Kingsbury Utilities serves 200 customers, including a trailer park, about 27 homes, and most of the industries in the Industrial Park.

Contact me for further information.

MRR/eam

cc: Reggie Baker
Jackie Strecker



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Mendian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

July 13, 1988

Mr. Jim Cotton
Kingsbury Utility Corporation
P.O. Box 12
Kingsbury, IN 46345

Dear Mr. Cotton:

On May 5, 1988, James Nowacki of the IDEM Ground Water Section, collected a set of water samples from Kingsbury Utilities' wells E and B, and from the distribution system at the point of entry to the Cardinal Chemical building. We have received the analytical results which show that at the time the samples were collected, no volatile organic or synthetic organic chemicals were present in excess of a maximum contaminant level in either well. Only 1.6 micrograms per liter trichloroethylene was detected, in well B.

Trichloroethylene was reported at 14 micrograms per liter at the Cardinal Chemical sample location. The source of the trichloroethylene in this distribution sample has not been determined. Bottled water was observed to be present at Cardinal Chemical.

A copy of the lab report is enclosed. The IDEM Public Water Supply Section can be contacted about further testing of your water system, (Wayne Brattain at 317/243-5099). Questions about these test results can be directed to James Nowacki of my staff at 317/243-5140.

Sincerely,

Martin R. Risch, Chief
Ground Water Section
Office of Environmental Response

JAN/eam

cc: Arnie Viere, IDEM Public Water Supply Section

INDIANA DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

page 1 of 1

CHAIN OF CUSTODY

___OWM

___OSHW

OER

___OAM

I certify that the samples listed below were collected by me or in my presence.

Signature J. A. Murphy

IDEM

Sample

Consisting of the Indicated

Date Collected

ID No.

No. of Bottles and Types

and Time Sealed

GW 55891A	2 - VIALS / 2 - 1-1.5L	5/5/88 10:20 AM/PM
GW 55891B	2 - VIALS / 2 - 1-1.5L	5/5/88 9:25 AM/PM
GW 55891C	2 - VIALS / 2 - 1-1.5L	5/5/88 9:02 AM/PM
Blank	2 - VIALS	5/5/88 9:02 AM/PM
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---
---	---	---

CARRIERS

I certify that I received the above samples.

Signature	Date and Time	Seals Intact	Comments
Relinquished By: <u>J. A. Murphy</u>	<u>5/5/88</u>	<u>Y / N</u>	
	<u>5/5</u>	<u>Y / N</u>	
	<u>5/5</u>	<u>Y / N</u>	
	<u>5/5</u>	<u>Y / N</u>	
Relinquished By: _____	<u>5/5</u>	<u>Y / N</u>	
Received By: _____	<u>5/5</u>	<u>Y / N</u>	

LAB CUSTODIAN

I certify that I received the above samples. After recording these samples in the official record book, these same samples will be in the custody of competent laboratory personnel at all times or locked in a secured area.

Signature Mad. Strigano Date 5/5/88 Time 4:29 AM/PM AM
Lab ENV Address _____

roboxin	ug/l	
neb	ug/l	
iram	ug/l	
latile Organics	X ug/l	
sticides organo chlorine	ug/l	

Sample ID Number GW-5-5-94-A
Sample Site CARDINAL CATHEDRAL, KING'S BURY
INDIANA

Sample Date 5-5 88 Time 10:20 am pm

Delivered Date _____ Time _____ : _____ am/pm

Collector(s) JAMES NOWACKI

Sample: Softened Filtered Raw X
Field Lab

No. of 250 ml Plastic Bottles

No. of 500 ml Plastic Bottles

No. of Purgeable Vials	<u>2</u>	<u>2</u>
------------------------	----------	----------

No. of 1 Liter Glass Bottles $\frac{2}{2}$

of Bacteriological Bottles

of 500 ml Glass Jars

No. of 1 Liter Plastic Bottles _____

No. of 2 Liter Plastic Bottles _____

Preservative	Amount	Lot#	Bottle Type
--------------	--------	------	-------------

50% H_2SO_4 500 ml plastic

HNO₃ ————— 1-liter plastic

50% NaOH ————— 1-liter plastic

50% H_2SO_4 ————— 1-liter glass

CHILLED

Parameter	Unit	Lab Data
pH	S.U.	
Specific Conductance	umhos	
Hardness as CaCO ₃	mg/l	
Sulfate as SO ₄	mg/l	
Fluoride as F	mg/l	
Chloride as Cl	mg/l	
Total Dissolved Solids	mg/l	

Nitrate, NO ₃ as N	mg/l	
Nitrogen, TKN	mg/l	
Total Organic Carbon	mg/l	
Aluminum as Al	ug/l	
Arsenic as As	ug/l	
Barium as Ba	ug/l	
Cadmium as Cd	ug/l	

Lab ID No. R 374
Date Samples Received 11/15/1988
Samples Received By MS
Temperature When Received 10°C

Parameter	Unit	Lab Data
Chromium, Total Cr	ug/l	
Copper as Cu	ug/l	
Iron as Fe	ug/l	
Lead as Pb	ug/l	
Manganese as Mn	ug/l	
Mercury as Hg	ug/l	
Nickel as Ni	ug/l	
Potassium as K	ug/l	
Selenium as Se	ug/l	
Sodium as Na	mg/l	
Silver as Ag	ug/l	
Zinc as Zn	ug/l	
Cyanide	mg/l	
Sulfide	mg/l	
Oil and Grease	mg/l	
Phenol, Total	ug/l	
Total Coliform Bacteria	MPN/100 ml	
Fecal Coliform Bacteria	#/100 ml	
Alachlor	ug/l	
Atrazine	ug/l	
Butylate	ug/l	
Cyanazine	ug/l	
Dicamba	ug/l	
Metolachlor	ug/l	
Metribuzin	ug/l	
Trifluralin	ug/l	
2, 4,-D	ug/l	
2, 4, 5,-T	B/N ug/l	
Carbaryl	ug/l	
Carbofuran	ug/l	
Chlorpyrifos	ug/l	
Fenofos	ug/l	
Phorate	ug/l	
Terbufos	ug/l	

[illegible]

[illegible]

Sample ID Number GW- 5598-E
Sample Site WELL E, KINGSBURY INDS.
FARM, KINGSBURY INDIANA

	Field	Lab
No. of 250 ml Plastic Bottles	_____	_____
No. of 500 ml Plastic Bottles	_____	_____
No. of Purgeable Vials	<u>2</u>	<u>2</u>
No. of 1 Liter Glass Bottles	<u>2</u>	<u>2</u>
of Bacteriological Bottles	_____	_____
of 500 ml Glass Jars	_____	_____
No. of 1 Liter Plastic Bottles	_____	_____
No. of 2 Liter Plastic Bottles	_____	_____
Preservative	Amount	Lot#
50% H ₂ SO ₄	_____	_____
HNO ₃	_____	_____
50% NaOH	_____	_____
50% H ₂ SO ₄	_____	_____
	Bottle Type	
	500 ml plastic	
	1-liter plastic	
	1-liter plastic	
	1-liter glass	

Parameter	Unit	Lab Data
pH	S.U.	
Specific Conductance	umhos	
Hardness as CaCO_3	mg/l	
Sulfate as SO_4	mg/l	
Fluoride as F	mg/l	
Chloride as Cl	mg/l	
Total Dissolved Solids	mg/l	
Calcium as Ca	mg/l	
Alkalinity as CaCO_3	mg/l	
Nitrite, NO_2 as N	mg/l	
Ammonia, NH_3 -N	mg/l	
OD	mg/l	
Phosphorus as Total P	mg/l	
Nitrate, NO_3 as N	mg/l	
Nitrogen, TKN	mg/l	
Total Organic Carbon	mg/l	
Aluminum as Al	ug/l	
Arsenic as As	ug/l	
Barium as Ba	ug/l	
Cadmium as Cd	ug/l	

Lab ID No. R376
Date Samples Received / /
Samples Received By ms
Temperature When Received 10°C

[illegible]

[illegible]

LOCATION: KINGSBURY

ANALYST: PH

D.L. = Detection Limit

DATE COLLECTED: 05/05/88

N.A. = Not analyzed

DATE RECEIPT: 05/05/88

DATE REPORTED: 05/19/88

COMPOUND	Detection Limit		RR0374	RR0375	RR0376
	SOLID mg/Lg	LIQUID mg/L	LIQUID WELL	LIQUID WELL	LIQUID WELL

Aniline	1.5	<	D.L.	<	D.L.
Bis(2-Chloroethyl)ether	1.5	<	D.L.	<	D.L.
1,3-Dichlorobenzene	2.0	<	D.L.	<	D.L.
1,4-Dichlorobenzene	1.0	<	D.L.	<	D.L.
1,2-Dichlorobenzene	1.0	<	D.L.	<	D.L.
Benzyl Alcohol	2.5	<	D.L.	<	D.L.
Bis(2-Chloroisopropyl)ether	4.5	<	D.L.	<	D.L.
Hexachloroethane	4.0	<	D.L.	<	D.L.
n-Nitrosodipropylamine	6.0	<	D.L.	<	D.L.
Nitrobenzene	2.5	<	D.L.	<	D.L.
Isophrone	1.0	<	D.L.	<	D.L.
Bis(2-Chloroethoxy)methane	1.5	<	D.L.	<	D.L.
1,2,4-Trichlorobenzene	2.0	<	D.L.	<	D.L.
Naphthalene	1.0	<	D.L.	<	D.L.
4-Chloroaniline	1.5	<	D.L.	<	D.L.
Hexachlorobutadiene	3.0	<	D.L.	<	D.L.
2-Methylanthracene	1.0	<	D.L.	<	D.L.
Hexachlorocyclopentadiene	4.0	<	D.L.	<	D.L.
2-Chloronaphthalene	1.0	<	D.L.	<	D.L.
2-Nitroaniline	2.0	<	D.L.	<	D.L.
Dimethylphthalate	1.0	<	D.L.	<	D.L.
Acenaphthylene	1.0	<	D.L.	<	D.L.
2,6-Dinitrotoluene	2.0	<	D.L.	<	D.L.
3-Nitroaniline	2.5	<	D.L.	<	D.L.
Acenaphthene	1.0	<	D.L.	<	D.L.
Dibenzofuran	1.0	<	D.L.	<	D.L.
2,4-Dinitrotoluene	2.0	<	D.L.	<	D.L.
Fluorene	1.0	<	D.L.	<	D.L.
Diethylphthalate	1.0	<	D.L.	<	D.L.
4-Chlorophenylphenylether	1.5	<	D.L.	<	D.L.
4-Nitroaniline	3.0	<	D.L.	<	D.L.
n-Nitrosodiphenylamine	1.0	<	D.L.	<	D.L.
1,2-Diphenylhydrazine	2.0	<	D.L.	<	D.L.
4-Bromophenylphenylether	2.0	<	D.L.	<	D.L.
Hexachlorobenzene	5.2	<	D.L.	<	D.L.
Phenanthrene	1.0	<	D.L.	<	D.L.
Anthracene	1.0	<	D.L.	<	D.L.
Carbazole	1.0	<	D.L.	<	D.L.
Di-n-Butylphthalate	1.0	<	D.L.	<	D.L.
Fluoranthene	1.0	<	D.L.	<	D.L.
Pyrene	1.0	<	D.L.	<	D.L.
Butylbenzylphthalate	2.0	<	D.L.	<	D.L.
Benzo(a)Anthracene	3.0	<	D.L.	<	D.L.
Chrysene	3.5	<	D.L.	<	D.L.
Bis(2-ethylhexyl)phthalate	1.5	<	D.L.	<	D.L.
Di-n-Octylphthalate	1.5	<	D.L.	<	D.L.
Benzo(b)Fluoranthene	2.5	<	D.L.	<	D.L.
Benzo(k)Fluoranthene	2.5	<	D.L.	<	D.L.
Benzo(a)Pyrene	3.5	<	D.L.	<	D.L.
Indeno(1,2,3-cd)pyrene	3.5	<	D.L.	<	D.L.
Dibenzo(a,h)Anthracene	3.5	<	D.L.	<	D.L.
Benzo(ghi)Perylene	3.5	<	D.L.	<	D.L.

REPORTED

MO

U.S. DEPARTMENT OF HEALTH
ENVIRONMENTAL AGENCY

LOCATION : KINGSBURY
 DATE OF COLLECTION : 05/05/88
 DATE OF SAMPLE RECEIPT : 05/05/88
 DATE SAMPLE REPORTED : 05/09/88

REPORTED

MAY - 9 1988

MO

Indiana State Board of Health
 Environmental Laboratory Division
 - VOC's -

ANALYST : SK
 UNITS OF CONC. : Liquid (ug/l) ppb
 Solid (mg/Kg) ppm

COMPOUND

D.L.

1,1 Dichloroethylene 1.0
 1,1 Dichloroethane 1.0
 Chloroform 1.0
 Carbon Tetrachloride 1.0
 1,2 Dichloropropane 1.0
 Trichloroethylene 1.0
 1,1,2 Trichloroethane 1.0
 Dibromochloromethane 1.0
 Tetrachloroethylene 1.0
 Chlorobenzene 1.0
 Trichlorofluoromethane 1.0
 T- 1,2 Dichloroethylene 1.0
 1,2 Dichloroethane 1.0
 1,1,1 Trichloroethane 1.0
 Bromodichloromethane 1.0
 T- 1,3 Dichloropropene 1.0
 C- 1,3 Dichloropropene 1.0
 Bromoform 1.0
 1,1,2,2 Tetrachloroethane 1.0
 Methylene Chloride 5.0
 Vinyl Chloride 4.0
 1,4 Dichlorobenzene 1.0

Acetone 20.
 Methyl Ethyl Ketone 6.0
 Methyl Isobutyl Ketone 3.0
 Benzene 1.0
 Toluene 1.5
 Ethyl Benzene 2.0
 Total Xylene 9.0

Fuel Oil 100
 Gasoline 20.

cardinal
chem.

Well
B

Well
E

blank

Note : D.L. = Detection Limit
 N.A. = Not Analyzed

CASE NO. 82-006 NAME Fisher-Calo DATE 82
CITY Kingstony COUNTY LaPorte DATE CLOSED

SOURCE OF INFORMATION (Circle One): Ind. Pond (A-36) one Line Road LaPorte Co 41° 30' 76° 40' 35N 2W 5 SW 33 wells City of Kingstony & Kingsbury both @ 2 mi from plant

NATURE OF COMPLAINT

☐ TASTE
☐ ODOR
☐ COLOR
☐ SEDIMENT
☐ SUSPECTED
☒ KNOWN SOURCE
☐ HEALTH
☐ SAMPLE

TYPE OF WELL

☐ PUBLIC
☒ RESIDENTIAL
☐ SEMIPUBLIC
☐ INDUSTRIAL
☐ AGRICULTURAL
☒ MONITOR
☐ OTHER

WELL CONSTRUCTION (NO.)

☐ DRILLED
☐ DRIVEN/SET
☐ dug
☐ CEMENT ADAPTER
☐ UNKNOWN

WELL AGE-MIN

WELL CAPACITY

WELL DEPTH-MIN

WELL AGE-MAX

WELL LOG AVAILABLE

WELL DEPTH-MAX

SPECIFIC STATIC WATER LEVEL (FROM WELL LOG)
STATIC WATER LEVEL-MIN
STATIC WATER LEVEL-MAX

SOIL TYPE (Circle One): GRAVEL, SAND, PEAT, ABS-CLAY, SANDY LOAM, LOAM, SILTY LOAM, CLAY LOAM, MUCK, CLAY, NONE

UNCONSOLIDATED DEPOSITS (Circle One): BUTTRESS, TILL, SOLIAN, LACUSTRINE, KAMES, ESKERS, ALLUVIUM, BEACH, PEAT/MUCK/MARL

BEDROCK GEOLOGY (Circle One): SHALE, SANDSTONE, SILTSTONE, BEDDED LIMESTONE, KARST LIMESTONE, BLACK SHALE

LESS THAN 50 FT. UNCONSOLIDATED DEPOSITS: Y or N

NO. OF WELLS AFFECTED 14 NO. OF WELLS TOTAL 34

POPULATION SERVED (PUBLIC): monitoring wells

DISTANCE TO AFFECTED WELL - MIN.

DISTANCE TO AFFECTED WELL - MAX.

2/3 mi - PUBLIC WATER SUPPLY WITHIN 500 FT. (Circle One): YES, NO, UNK, NA, CON

PUBLIC SEWER SERVICE WITHIN 500 FT. (Circle One): YES, NO, UNK, NA, CON

LAB DATA CONFIRMING CONTAMINATION (Circle One): ISBH, EMS, EIS, SHERRY, ECI

SOURCE/PATHWAY OF CONTAMINATION

PIT, POND, OR LAGOON ☐ UI WELL ☐ DRY WELL ☐ SEPTIC SYSTEM ☐

HAZARDOUS WASTE DISPOSAL ☒ SOLID WASTE DISPOSAL ☐ UST AND PIPING ☐

IMPROPER WELL CONST. ☐ AST AND PIPING ☐ LIQ. TRANS. PIPELINE ☐

SALT FACILITY ☐ ACCIDENTAL MATERIAL SPILLS/LOSSES ☒ PEST. APPL. ☐

PEST. STORAGE/DISPL. ☐ OIL/GAS RECOVERY OP ☐ leaking drums buried

ABANDONED WELL/HOLE ☐ OTHER ☐ Spills, leaks, dumping

REMEDIAL ACTION

PUBLIC WATER CONNECTION ☐ POINT OF USE TREATMENT ☐ BOTTLED WATER USE ☐

WELL ABANDONMENT ☐ DISINFECTION ☐ NEW WELL INSTALLED ☐

INTERCEPTOR/BARRIER WELL ☐ WELL REPAIR ☐ PUMP AND DECONTAMINATE ☐

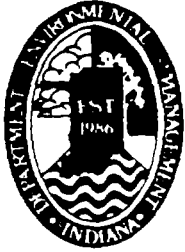
RECOVERY WELL ☐ CONTAMINANT SOIL REMOVAL ☒ LONG TERM MONITORING ☒

NO ACTION ☐ OTHER ☐

documented 006 TCE 99 9800

CODE #	CONTAMINANT	CONCENTRATION-MIN	CONCENTRATION-MAX	UNITS
002	1,1-dichloroethene	11,12,13,10,180,590	760,1700	ppb
other 196	trichloroethene	11,22,100,390,349,150	3900	
other	tetrachloroethene	30, 320	2300	
031	Methyl Ethyl Ketone	110	520	
042	Toluene		730	
014	1,1,1-Trichloroethene	100, 180	10,000	

packaging, storage + distribution of industrial chemicals + reaction solvents +



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street

P.O. Box 6015

Indianapolis 46206-6015

Telephone 317-232-8603

May 23, 1988

M E M O R A N D U M

TO: All IDEM Staff

FROM: Nancy A. Maloley *NAM*
Commissioner

SUBJECT: Fisher-Calo

Friday IDEM staff participated with the Indiana State Police in the arrest of Mr. Marvin Mitchell, a former employee of Mr. Fisher, president of Fisher-Calo in LaPorte County. Warrants have also been served against Mr. Fisher, following a lengthy criminal investigation by IDEM's Office of Investigations.

These actions are likely to generate many inquiries from legal officials, the media and interested citizens. All inquiries related to the investigation should be directed to Catherine Lynch, Office of External Affairs, at 232-8560.

Thank you for your cooperation in this matter.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: May 27, 1988

TO: James Nowacki, Groundwater Section
Office of Emergency Response

THRU: Thomas L. Russell
Martin R. Risch

FROM: Michael E. Sickels, Enforcement Section MES
Solid and Hazardous Waste Management 5/27/88

SUBJECT: Ground Water Contamination in
Kingsbury Industrial Park
LaPorte County, Indiana

In regard to the recent discovery of solvent contamination in the Kingsbury Utilities Corporation's water supply system, I am forwarding some historical information which may be useful in your present ground water investigation being conducted with the Site Management Section.

Because of known ground water contamination originating from the Fisher-Calo Chemicals Solvents Corporation's Second Road Facility (Fisher-Calo), water samples were obtained from the above utility's distribution system and from private wells surrounding the Kingsbury Industrial Park on June 26, 1987. Samples were obtained from the Kingsford Heights Water Department's supply wells on September 7, 1987.

The results from these two (2) sampling events revealed no presence of solvents or other volatile organic chemicals. These results are included in Attachments II and IV to this memorandum.

Also included are historical legal documents and ground water data accumulated pursuant to the Consent Decree (Civil Action No. S 80-204), regarding the documented ground water contamination caused by Fisher-Calo.

Attached to this memorandum is a Table of Contents which will identify by Attachment Number the location of the information. Based on this information, it cannot be determined whether the source of the contamination within the distribution system is from one or more of the supply wells, or infiltration into one of the water distribution lines. Further sampling will be required to pinpoint the source.

The following information includes contacts and well data for the two (2) public water supplies in the area of concern.

- I. Kingsbury Utilities Corporation
P.O. Box 119
LaPorte, Indiana 46350
Superintendent = Mr. Ron Pogowski, May 1984

Maximum System Rate = 1,426,000 GPD/AVER = 600,000 GPD

James Nowacki, Groundwater Section
Page 2
May 26, 1988

WELL NO.	DIA.	PUMP CAPACITY	STATIC LEVEL	PUMP LEVEL	DATE DRILLED	DEPTH
A	12"	490 GPM	20'	55'	1941	87'
B	TAKEN OUT OF SERVICE SUMMER 1984					(Finished in clay)
E	12"	500 GPM	18'	35'	1941	92'

Well Locations--A = Intersection of First and Hupp Roads,
B = Intersection of Third and Hupp Roads,
E = One Block East of State Road 35 and 200 feet North of Hupp Road.
The above information was obtained from a February 22, 1985, ISBH
Inspection Form, a copy of which is in Attachment I.

II. Kingsford Heights Water Department
500 Park Road
Kingsford Heights, Indiana 46346
Superintendent = Mr. Ron Cooper, AC 219/393-3309, (Town Hall)
219/393-3396 (Plant)
Kingsford Heights
Pop. Served = 1,600 @ 525 connections
Maximum Rate = 252,000 GPD/AVER = 146,604 GPD

WELL NO.	DIA.	PUMP CAPACITY	DRAW	STATIC LEVEL	DATE DRILLED	DEPTH
1	12"	500 GPM	18'	23'	1/21/86	74'
2	12"	500 GPM	12'	23'	1/21/86	68'
3	12"	500 GPM	18'	20'	1/21/86	60'

Well Locations--(See diagram attached to Attachment IV.)
The above information was obtained from a January 8, 1985, EPA
Inspection Form, a copy of which is included in Attachment III.

If you have any questions regarding the attached information, or require
further correspondence or sample data, please call me at AC 317/232-3406.

Attachments

cc: Mr. Dan Menefee (No Attachments)

Table of Contents

Kingsbury Utilities Corporation	Attachment I
Water Supply Background Information	
Kingsbury Utilities Corporation	Attachment II already have
Sample Results	
Kingsford Heights Water Department	Attachment III
Water Supply Background Information	
Kingsford Heights Water Department	Attachment IV already have
Sample Results	
Correspondence to Private Well Homeowners	Attachment V
and Kingsbury Utilities Corporation	
Complaint for Injunctive Relief	Attachment VI already have
United States of America vs. Fisher-Calo	
Ground Water Study of KIP	Attachment VIII already have
Consent Decree Resulting from	Attachment VIII already have
Civil Action No. S 80-204	
Ground Water Monitoring Results	Attachment IX already have

Attachment I

Kingsbury Utilities Corporation
Kingsbury Industrial Park
P.O. Box 119
LaPorte, Indiana 46350

Water Supply
Background Information
and
Historical Sampling Reports

GROUND WATER SUPPLY DATA

City or Town Kingsbury Utility County LAPORTE Insp. by ERNEST BURCHAM Date 2/22/85
 Source of Information LAYNE-NORTHERN COMPANY Title WELL & PUMP INSPECTION REPORT

Mayor or Pres. T. B. W. J. COTTON Clk-Treas. _____ Meeting _____

Telephones (219) 393-3575

Well No.	Diam.	Type	Depth	Static W L	Pump. Level	Capacity GPM	Formation	Drilled by	Year
<u>A</u>	<u>34X12</u>	<u>G.W.</u>	<u>87'</u>	<u>20'</u>	<u>55</u>	<u>490</u>	<u>G.P.</u>		<u>1941</u>
<u>E</u>	<u>34X12</u>	<u>G.W.</u>	<u>92'</u>	<u>18'</u>	<u>35</u>	<u>500</u>	<u>G.P.</u>		<u>1941</u>

Pump No.	Type	Capacity GPM	Mfr.	Total Dyn.Hd.	Setting Depth	Motor Mfr.	H.P.	Stand-by Prime Mover
<u>A</u>						<u>G.E.</u>	<u>40</u>	<u>PRIME MOVER</u>
<u>E</u>						<u>G.E.</u>	<u>50</u>	<u>STAND BY</u>

STAND-BY POWER: NONE

PUMPAGE: Aver. Day 600,000 gals. Max. Day 1,426,000 gals.
 STORAGE: Gravity to System None M.G.(EST/SP). Pumped to System _____ M.G.
 TREATMENT: (Give number, size, kind, capacity of units and plant. Code treatment.)

HIGH SERVICE Pump No.	Type	Capacity GPM	Mfr.	Total Dyn.Hd.	Motor Mfr.	H.P.	Stand-by Prime Mover

SUBMITTING: Operation Reports ✓. Samples ✓. Sampling Schedule 1/wk.

LIMITING FEATURE to greater production: _____

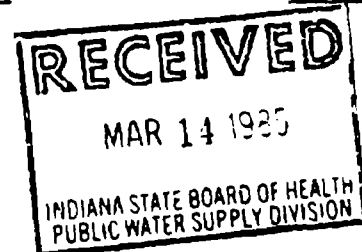
MAXIMUM HOURS PER DAY: Wells run 24 hrs. Treatment Plant Operated _____

IMPROVEMENTS MADE _____

FACILITIES NEEDED IRON Removal

SERVICES: Number 50. 60 % Metered. 75 % Corporation Served.

Homes not served. 19 Population _____ Population Served 300



RATES: Minimum \$_____ per _____ Mo. for _____ gal. First _____ @ \$_____
Next _____ @ \$_____. Next _____ @ \$_____

FIRE HYDRANTS: No. in system _____. Rental \$_____/yr./hyd. Paid? _____
Date Last Inspected _____.

FINANCIAL: Amt. Bond Outstanding \$_____. Paid out in _____
Amt. in Depreciation Fund \$_____

CHLORINATION: Type Feeders _____. Make _____
Residual at Plant _____ mg/l. In System _____ .7 _____ mg/l

CROSS CONNECTIONS: (Give name, size, date of last inspection for each)

DEAD ENDS: Number _____. Flush Hydrants? _____; or Flush Valve? _____

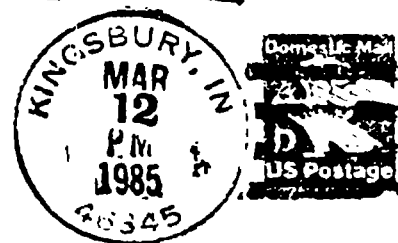
VALVE INSPECTION PROGRAM _____
Valve card file up to date _____

SAMPLES COLLECTED: ONCE (1) A WEEK FOR BACT. TEST. 5 FOR 7 ON BACT.

PLANT WASTES DISPOSED: SEWER PLANT. Kingsbury Utility Corp.

RECOMMENDATIONS: _____

REMARKS, FIELD TESTS: (Sketches)



Division of Sanitary Engineering
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, IN 46206

MAY 8 1984

5W0-12
SS

Mr. D. Rogowski
Superintendent
Kingsbury Utility Corporation
P.O. Box 119
LaPorte, Indiana 46350

PWS10: 5246013

Dear Mr. Rogowski:

You will recall I wrote to you a few months ago to explain a monitoring survey we are conducting to determine the extent of volatile synthetic organic chemicals (VOCs) in public drinking water wells. Enclosed is a copy of the laboratory results for samples that were subsequently collected from your system by our staff.

The analysis of the water sample was performed by gas chromatography/mass spectrometry, which is capable of detecting extremely low concentrations. To place these measurements in perspective, one microgram per liter (ug/l) is equal to about one drop in a railroad tank car full of water. It is therefore not uncommon to detect minute quantities of some chemicals in the samples we have been collecting. The chemicals detected could be related to nearby use or disposal of cleaners, solvents, or petroleum by-products, or could be contamination picked up by the sample in handling or shipping.

From the toxicological information presently available, we feel the quantities of all the volatile synthetic organic chemicals detected in your drinking water can be considered negligible. It is our usual policy however, to resample systems showing any VOC level above 1 ug/l.

Due to an incident of in-house contamination from 1,1,1-trichloroethane at our analytical facility, the detection limit for this chemical ranged from 0-2 ug/l during the analyses. To determine if the level of 1,1,1-trichloroethane actually exceeds 1 ug/l in your water system, we intend to resample your system in the future. My office will be calling you in the next few weeks to arrange a sampling visit at our mutual convenience. If you have any questions on this sampling or analysis, please feel free to contact Sheila Sullivan or me at (312) 353-2653.

Sincerely yours,

Joseph F. Harrison, Chief
Drinking Water Section

Enclosure

cc: ✓ Arnold Moore, ISM
LaPorte County Health Department

OFFICE OF DRINKING WATER
TECHNICAL SUPPORT DIVISION

M2M DATASHEET FOR PURGEABLE HALOCARBON ANALYSIS

INDIANA

SAMPLE NUMBER: 66850

DATE COLLECTED: SEPTEMBER 26, 1983

LOCATION KINGSBURY UTILITY CORP.
KINGSBURY, IN.

SOURCE: FINISHED/GROUND
POPULATION: 200

PWSEID#

5246013

PARAMETERS

RESULTS(UG/L)

CHLOROFORM	<0.5
BROMODICHLOROMETHANE	<0.5
DICHBROMOCHLOROMETHANE	<0.5
BROMOFORM	<0.5
VINYL CHLORIDE	<0.5
DICHLORODIFLUOROMETHANE	<0.5
TRICHLOROFLUOROMETHANE	<0.5
1,1-DICHLOROETHYLENE	<0.5
1,1-DICHLOROETHANE	<0.5
CIS/TRANS-1,2-DICHLOROETHYLENE	<0.5
1,1,2-TRICHLORO-1,1,2,2-TETRAFLUOROETHANE	<0.5
1,2-DICHLOROETHANE	<0.5
1,1,1-TRICHLOROETHANE	<2.0
CARBONTETRACHLORIDE	<0.5
1,2-DICHLOROPROPANE	<0.5
2,3-DICHLOROPROPENE	<0.5
TRANS-1,3-DICHLOROPROPENE	<0.5
TRICHLOROETHYLENE	<0.5
1,1,2-TRICHLOROETHANE	<0.5
CIS-1,3-DICHLOROPROPENE	<0.5
1,1,1,2-TETRACHLOROETHANE	<0.5
TETRACHLOROETHYLENE	<0.5
1,1,2,2-TETRACHLOROETHANE	<0.5
CHLOROBENZENE	<0.5

→ per-
manganate

PRESERVATIVE=MERCURIC CHLORIDE
NO CHEMICAL REDUCING AGENT ADDED
NA=NOT ANALYZED, N=MISSING INFORMATION

Check Space

Branch		Eng. Div.	☒
Dental		EPA	☒
Other			

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division

1330 West Michigan Street

P.O. Box 1964

INDIANAPOLIS, INDIANA 46206-1964

Chemical Examination of Water

S. D. W. IV.

Do not write in this space

Lab. No. C. 8438Date Rec. Aug - 5 1986Date Rep. NOV 5 1986

FILL IN THIS SPACE. USE SOFT PENCIL.

Indiana State Board of Health is to mail report to

(Name) Kingsbury Util. Corp(Street) P.O. Box 119(City or Town) Lafayette INDIANA46350

Also, mail copy of report to

(Name)	
(Street)	
(City or Town)	

Name of Utility or Organization Water Util. Supt. _____

City or Town _____

Collected by: E. Burcham Date Collected 7-29-86 Hour 11:49 AWhere was sample collected? Office Rest Room Bottle No. 406ed.Name unusual conditions Dist. sys.

FIELD INFORMATION

LABORATORY EXAMINATION

Indicate all treatment this sample has received.

Check	Check	Do not Check mg/l	Check	Do not Check mg/l
No Treatment			Odor	☒ <.002
Chlorination	☒		Color	☒ 0.110
Plain sedimentation			Turbidity	☒ <.002
Aerated and settled			pH	☒ 7.8
Potassium Permanganate			Hardness as CaCO ₃	☒ 256
Coagulant Aid			MO Alk. as CaCO ₃	☒ 178
Prechlorinated			PP Alk. as CaCO ₃	
Filtered			Iron as Fe	☒ 0.05
Postchlorinated			Manganese as Mn	☒ <.02
Zeolite softened			Calcium as Ca	☒ 70
Lime-soda softened			Magnesium as Mg	☒ 20
Coagulated and settled			Sodium as Na	☒ 2.8
Phosphate treatment			Potassium as K	☒ 1.0
Fluoride treatment			Chlorides as Cl	☒ 13
			Sulphates as SO ₄	☒ 59
			Phosphates as PO ₄	☒ <.09
			Radionuclides	pCi
			Gross Alpha	
			Gross Beta	

REMARKS

Branch		Eng.Div.	✓
Dental		EPA	✓
Other			

Chemical Examination of Water

S. D. W. F.

Date Rep. _____

INDIANA

(City or Town)

46350

Name unusual conditions Dist. sys

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment		Odor			Arsenic as As	✓	0.007
Chlorination	✓	Color			Barium as BA	✓	20.030
Plain sedimentation		Turbidity			Cadmium as Cd	✓	20.002
Aerated and settled		pH	✓	7.5	Chromium (Total)	✓	20.010
Potassium Permanganate					Lead as Pb	✓	20.010
Coagulant Aid		Hardness as CaCO ₃	✓	272	Mercury as Hg	✓	20.001
Prechlorinated		MO Alk. as CaCO ₃	✓	200	Selenium as Se	✓	0.0002
Filtered		PP Alk. as CaCO ₃			Silver as Ag	✓	20.010
Postchlorinated							
Zeolite softened		Iron as Fe	✓	300	Fluorides (direct) as F	✓	0.5
Lime-soda softened		Manganese as Mn	✓	040	Nitrates as N	✓	0.8
Coagulated and settled							
Phosphate treatment		Calcium as Ca	✓	70	Organics		
Fluoride treatment		Magnesium as Mg	✓	23	Endrin		
		Sodium as Na	✓	5.4	Lindane		
		Potassium as K	✓	1.5	Methoxychlor		
					Toxaphene		
		Chlorides as Cl	✓	9	2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄	✓	56	2,4,6-TP		
pH		Phosphates as PO ₄	✓	20.07			
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
		Sp. Cond. μ mhos/cm			Gross Beta		

REMARKS:

Check Space

Branch		Eng. Div.	✓
Dental		EPA	
Other	W. Steen		

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Chemical Examination of Water

Do not write in this space

Lab. No. C. 9724

Date Rec. OCT - 4 1983

Date Rep. JAN 26 1984

FILL IN THIS SPACE. USE SOFT PENCIL.
Indiana State Board of Health is to mail report to
Kingsbury Utility Corp.
(Name)
P.O. Box 119
(Street)
Laporte, INDIANA
(City or Town) *46305*

[REDACTED]

Name of Utility or Organization Kingsbury Util. Corp. Supt. D. Rogowski

City or Town Private owned.

Collected by: E. Burcham Date Collected 8-29-83 Hour 11:45 A

Where was sample collected? Well "F" Bottle No. Lab

Name unusual conditions Row Water.

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment	✓	Odor			Arsenic as As		
Chlorination		Color			Barium as BA		
Plain sedimentation		Turbidity			Cadmium as Cd		
Aerated and settled		pH	✓	7.6	Chromium (Total)		
Potassium Permanganate					Lead as Pb		
Sulphuric Acid		Hardness as CaCO ₃	✓	228	Mercury as Hg		
Prechlorinated		MO Alk. as CaCO ₃	✓	200	Selenium as Se		
Filtered		PP Alk. as CaCO ₃			Silver as Ag		
Postchlorinated							
Zeolite softened		Iron as Fe	✓	4.3	Fluorides (direct) as F	✓	0.2
Lime-soda softened		Manganese as Mn	✓	0.45	Nitrates as N	✓	<0.1
Coagulated and settled							
Phosphate treatment		Calcium as Ca	✓	62	Organics		
Fluoride treatment		Magnesium as Mg	✓	18	Endrin		
		Sodium as Na	✓	14	Lindane		
		Potassium as K	✓	1.1	Methoxychlor		
					Toxaphene		
		Chlorides as Cl	✓	11	2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄	✓	30	2,4,5-TP		
pH		Phosphates as PO ₄	✓	10			
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
		Sp. Cond. μ mhos/cm			Gross Beta		

REMARKS:

Check Space

Branch		Eng. Div.	X
Dental		EPA	X
Other			

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Chemical Examination of Water

Do not write in this space

Lab. No. C. 8335Date Rec. DEC 3 1980Date Rep. DEC 10 1980

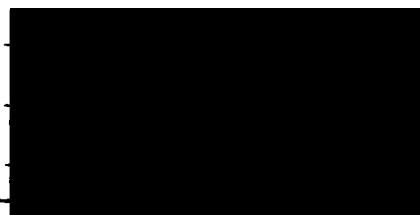
FILL IN THIS SPACE. USE SOFT PENCIL.
Indiana State Board of Health is to mail report to
KING MEURY UTILITY CORP.

(Name)
P. O. BOX 119

(Street)
LAFORTE, INDIANA

(City or Town)
46350

Also, mail copy of report to



INDIANA

Name of Utility or Organization WATER WORKS Supt. DON RCGOWSKICity or Town LAFORTECollected by: _____ Date Collected 3-13-79 Hour _____Where was sample collected? DIST. SYS. 6-13-79 9-13-79 12-13-79 Bottle No. _____Name unusual conditions SDWA RADIO ACT. COMP. SAMPLE

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.	Check		Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment		Odor			Arsenic as As		
Chlorination	☒	Color			Barium as BA		
Plain sedimentation		Turbidity			Calcium as Cd		
Aerated and settled		pH			Chromium (Total)		
Potassium Permanganate					Lead as Pb		
Coagulant Aid		Hardness as CaCO ₃			Mercury as Hg		
Rechlorinated		MO Alk. as CaCO ₃			Selenium as Se		
Filtered		PP Alk. as CaCO ₃			Silver as Ag		
Postchlorinated							
Zeolite softened		Iron as Fe			Fluorides (direct) as F		
Lime-soda softened		Manganese as Mn			Nitrates as N		
Coagulated and settled							
Phosphate treatment		Calcium as Ca			Organics		
Fluoride treatment		Magnesium as Mg			Endrin		
		Sodium as Na			Lindane		
		Potassium as K			Methoxychlor		
					Toxaphene		
		Chlorides as Cl			2,4-D		
		Sulphates as SO ₄			2,4,5-TP		
		Phosphates as PO ₄					
					Radionuclides		pCi/l
		Alum as Al			Gross Alpha	☒	0.37 ± 0.1
		Sp. Cond. μ mhos/cm			Gross Beta	☒	2.25 ± 0.1

REMARKS

41375

3771.1

3606 x 3.3 = 1190

N. W. 1/4	S. W. 1/4	
N. E. 1/4	S. E. 1/4	
C. 1/4	Eng. 1/4	X

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

SANITARY EXAMINATION OF WATER

SDWA

Do not write in this space
Lab. No. C. 1723
Date Rec MAR 15 1979
Date Rep APR 25 1979

FILL IN THIS SPACE. USE SOFT PENCIL.
Indiana State Board of Health is to mail report to
Kingsbury Util. Inc.
P.O. Box 119
La Porte, INDIANA
46350

Also, mail copy of report to

INDIANA

FILL IN ALL NECESSARY SPACES. USE SOFT PENCIL

Name of Utility or Organization Water Works Supt. Don Rogowski
Collected by: E. Burcham Date Collected 3-12-79 Hour 10:00 A
Where was sample collected? Util. office Bottle No. 1 abcd
Name unusual conditions Dist. sys.

FIELD INFORMATION

LABORATORY EXAMINATION

Indicate all treatment this sample has received.		Check	Do not Check	
	Check		Mg./L.	
No Treatment				Coliforms Confirmed
Chlorination	✓			M.P.N. per 100 Ml. _____
Plain sedimentation				
Coagulated and settled		✓	5.	
Filtered		✓	7.6	Standard Plate Count
Prechlorinated		✓	<0.002	35°C. Per 1 Ml. _____
Postchlorinated		✓	233	
Zincite softened		✓	62	Bacteriologist _____
Ion exchange softened		✓	30	Chemist _____
Coagulated and settled		✓	6.	
Phosphate treatment		✓	1.	
Fluoride treatment		✓	0.05	
		✓	1.0	
		✓	0.08	
		✓	0.001	
		✓	<0.02	
		✓	<0.01	
		✓	180	
		✓	10	
		✓	55	
		✓	0.1	
		✓	0.2	
		✓	0.4	
		✓	0.0001	
		✓	<0.001	
		✓	<0.01	

FIELD EXAMINATION

Alk. as CaCO₃

Alk. as CaCO₃

Chlorides as Cl₂

Sulphates as SO₄

Phosphates as P₂O₅

Fluorides (direct) as F

Fluorides (distill) as F

Nitrates as N

Mercury

Silica as SiO₂

Selenium

Silver

REMARKS:

Chemical Results are expressed in terms of Mg./L. except for Odor, Ph and Sediment.

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

TO: Jayne Browning
Site Management Section

FROM: Gregory A. Busch *GAB 1/7*
Quality Assurance Officer

SUBJECT: Review of Laboratory Results for Tarnow Well (Fisher-Calo), LaPorte County
Collected on October 7, 1986

DATE: January 5, 1987

THRU: Jack C. Corpuz *JC 1/7/87*
James E. Traylor *JET 1/7*
Jacqueline W. Strecker *JWS*
Reggie Baker *RB 1/7*

I have reviewed the attached laboratory results and have determined that they are acceptable for use. These results have been evaluated for the quality criteria contained in the Indiana Quality Assurance Project Plan (QAPP). Any exceptions to the acceptance of this data will be identified in this memorandum and should remain attached to the original results.

Field duplicate samples are used to establish the representativeness of the sampling (i.e., sampling error and/or sample homogeneity). The field duplicates compare well with the exception of results for iron.

There are no significant levels of priority pollutants detected in the samples collected on this day.

GAB/rmw
Attachments

PRM

11/1/86

	As	Ba	Cd	Cr	Pb	Hg	Se	Ag	Ni	Fe	Mn	Na	Cl ⁻	SO ₄	Phenols	Lab pH	TOC	Tot. Solids	Spec Conc
21537 RUP	<.01	<.01	<.001	<.01	<.01	5.0005	<.01	<.03	<.01	.06	.14	2.5	14	75	<.01	7.7	<3	360	430
72479 Dup	ND									.17	.15	3.1	14	80	ND	7.7	<3	380	420
21539 Blank	ND											<.1	2	ND	ND	6.3	<3	300	1.6

Residential Well (Fisher-Cala)
La Porte County

Gregory A. Busch
COMPLETED NOV 19 1986

continued

Thinnest Sheet Metal and Roofing - 26 Gauge and 24 Gauge Galvanized Steel
 1/2" Thick Castings with no appendages (valve, flanges, and fill ports)

[illegible]

W. R. F. Co. Inc., 1001, Fairview Blvd., 310-242-2421. Manufacturing of Iron and
Sulfur Fertilizers. No mention on Ecolife additionally use insecticide and
fungicide in 40% fertilizer mix use. No other usage in Product. No mention
of liquid chemical combination. EID water and EID resin.

PS&G Inc. Pipe P&G Plant, Inc. 219-969-9111 Manufacturer of 6' Plastic and
various of diam. 10' manholes on Exstall. Private well and skettov. 1980
Permit for discharge to local Ditch.

11151 Core 49 horizon on north oil. Testing of a riser (no) - no water out. and
no chemical at 110 water level in tank.

In the case of labeled channels, there is some nonuniformity in the way it has been handled by FIO systems.

In the area located above Leeland there is a zone manufactured by a firm under the control of a DPO and is a company's corporation selling as a DPO facility building to a contractor. He knows that he knows of the main level of the area. In this area, concrete construction will have to be undertaken. The area is located between the wells and above the point.

The first four trailers about 100 yards from the Park. The first trailer, located about 100 yards from the Park, is located about 100 yards from the Park. The second trailer, located about 100 yards from the Park, is located about 100 yards from the Park. The third trailer, located about 100 yards from the Park, is located about 100 yards from the Park. The fourth trailer, located about 100 yards from the Park, is located about 100 yards from the Park.

INDIANA PESTICIDE SURVEY
REGION V DRINKING WATER SECTION

~~AUGUST - SEPTEMBER 1987~~
February - March 1988

3/10/88
DATE OF SITE VISIT
PWSID 0241013 NAME OF SYSTEM Kingsburg Utilities (with Bob Stearns)
ADDRESS PO Box 112 (PO Box 12) CITY Kingsburg
COUNTY LaPorte STATE IN ZIP CODE 46345 PHONE (719) 393-3575
LATITUDE _____ LONGITUDE _____ (Helen office)
DAILY POPULATION SERVED (TRANSIENT) LaPorte (RESIDENT) Homes & Hrs. Property

(NO. of) TOTAL WELLS 3 DESCRIBE UTILITY Community Supply
Sample Col 1/1988 A Sample top at pump house
rotate among A B & E every month
One well at a time supplies all needs

TYPE OF WELL SAMPLED drilled (Drilled, gravel-pack, raney, spring, driven, or other types)
LOCATION OF WELL SAMPLED serves trailer & a house side access (27)
on side of house, the rest is for landscaping
COPY OF WELL LOG ON FILE

SAMPLE BOTTLE(S) ID RECORD NUMBER SCREEN 1
pesticide 73729
pesticide 73729
pesticide 73729
nitrate 5-100
For 12 Cap ID#

Station # S-05
Pro. # 1000
S8 P501

talked to Norman Bridgman President

Bruce Gooz, farms ~ 5000 Acres on property
5 yrs. now, possibly beans prior

WELL DEPTH 87 (FT) WELL DIAMETER 4x12 (INS) CASING MAT'L Steel
 PROPER WELL CONSTRUCTION (Y or N) Y (IS WELL SEALED?) Y
 DEPTH TO TOP OF SCREEN 61 (FT) DEPTH TO BOTTOM OF SCREEN 75 (FT)
 AQUIFER TYPE (SAND, GRAVEL, LIMESTONE, SANDSTONE, SHALE, ETC.) 15' screen Sand & gravel
 SOIL TYPE Sandy DRAINAGE (GOOD, AVERAGE, POOR) GOOD
 AQUIFER NAME (IF KNOWN) Kankakee Co. Fresh
 PUMPING CAPACITY 500 (GALLONS/MINUTE) (rated) STATIC WATER LEVEL 19 (FT)
 AVG. DAILY PUMPAGE (GPD) 7500 MAX. DAILY PUMPAGE (GPD) 7500

NOTES:

Drilled 1941

Static WL 19' Pumping 57'

15 hrs day X 500 = ~ 7500 GPD

only time 2 wells run is in case of fire

INDICATE THE APPROXIMATE PERCENTAGE OF LAND USE (0, 25, 50, 75 OR 100%)
 AGRICULTURAL 50% RESIDENTIAL 10% INDUSTRIAL 40% OTHER _____

DESCRIBE OTHER LAND USE Woodland

AGRICULTURAL ACTIVITY: NONE _____ RESIDENTIAL ONLY _____ ORCHARD _____

(INDICATE 'Y' IF PRESENT WITHIN 1/4 MILE OF WELL) CORN X SOY _____ DAIRY _____ LEGUMES _____

PESTICIDE STORAGE _____ IRRIGATION _____

note: If livestock other than dairy present, please indicate (Y/N) _____

CHEMIGATION _____

OTHER AGRICULTURAL TYPE ACTIVITIES (BRIEF DESCRIPTION)

only corn for profit & use

One farmer. Powers & his son do all the farming

but not ~ 5000 Acres farmed

IDN : VALPD
 DATE OF COLLECTION : 03/09/88
 DATE OF SAMPLE RECEIPT : 03/11/88
 SAMPLE REPORTED : 03/23/88

YST : RS
 TYPE OF CONC. : Liquid (ug/l) ppb
 Solid (ug/kg) ppb

	RR00129		RR00130		RR00132	
	SOLID	LIQUID	LIQUID	LIQUID	LIQUID	LIQUID
	D.L	D.L	WELL	WELL	WELL	WELL
Fe	44.	4.4	N.A.	N.A.	N.A.	N.A.
	0.30	0.030	N.A.	N.A.	N.A.	N.A.
Cr	2.0	0.20	N.A.	N.A.	N.A.	N.A.
Mn	20.	2.0	N.A.	N.A.	N.A.	N.A.
Chlor	2.0	0.20	N.A.	N.A.	N.A.	N.A.
Cine	70.	0.7	< D.L	< D.L	< D.L	< D.L
As	6.0	0.06	< D.L	< D.L	< D.L	< D.L
Se	40.	4.0	N.A.	N.A.	N.A.	N.A.
Baran	1200	12.	< D.L	< D.L	< D.L	< D.L
Be	480	4.8	< D.L	< D.L	< D.L	< D.L

e : D.L. = Detection Limit
 N.A. = Not Analyzed
 * = No Standard

Kingsbury
 well A



Handwritten signature

For _____ G. Holloman
By _____ E. Cleaton

Abstract: The purpose of this study was to investigate the effects of a 12-week training program on the physical fitness and health-related quality of life (HRQL) of sedentary middle-aged women. The study was a randomized controlled trial. The participants were divided into two groups: a training group and a control group. The training group participated in a 12-week program of aerobic and resistance training, while the control group remained sedentary. Physical fitness was assessed using a variety of tests, including a 6-minute walk test, a 400-meter shuttle run, and a 10-meter walk test. HRQL was assessed using the SF-36 questionnaire. The results showed that the training group had significantly higher levels of physical fitness and HRQL than the control group at the end of the 12-week program. The findings suggest that a 12-week training program can improve physical fitness and HRQL in sedentary middle-aged women.

The 1997 report and subsequent by-product provisions allow for depositing waste in a landfill for treatment of organic matter (OM) resulting indirectly. The 1997-2000 amendments, about which a draft design developed by the office is being prepared, will require that municipal OFR's transfer the resulting industrial waste to a

For the case of HIO_3 as one of the elements that I have in all sufficient that I can do this with both a more controlled and direct. The HIO_3 complex is a special case of the general complex thought by Jones. Different cases are manifested by Solvent effects. This is a case that has also been discussed in a paper brought that in general it is not a good idea to C condition and what is seen from the above. The different cases are not the same thing and this is not a simple subject.

THESE RESEARCH RESULTS HAVE BEEN SUBMITTED TO THE 1991 ANNUAL MEETING OF THE AMERICAN SOCIETY OF CLIMATE ENGINEERS, 1-4 DECEMBER 1991, IN NEW ORLEANS, LOUISIANA.

For example, understanding the role of the "endogenous" variables for the economic growth and development and the role of the externalities of public expenditure on the environment, the demands of the developed world, the ecological footprint, etc. are not only different, but also quite different.

[illegible]

For the first step, let $\mathbf{A} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$. Then $\mathbf{A} + \mathbf{B} = \begin{bmatrix} 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 2 \end{bmatrix}$. The eigenvalues of $\mathbf{A} + \mathbf{B}$ are 2, 2, and 2. The eigenvectors of $\mathbf{A} + \mathbf{B}$ are $\begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$, $\begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix}$, and $\begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}$. For the second step, let $\mathbf{A} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$ and $\mathbf{B} = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 1 \end{bmatrix}$. Then $\mathbf{A} + \mathbf{B} = \begin{bmatrix} 2 & 0 & 0 \\ 0 & 2 & 0 \\ 0 & 0 & 2 \end{bmatrix}$. The eigenvalues of $\mathbf{A} + \mathbf{B}$ are 2, 2, and 2. The eigenvectors of $\mathbf{A} + \mathbf{B}$ are $\begin{bmatrix} 1 \\ 0 \\ 0 \end{bmatrix}$, $\begin{bmatrix} 0 \\ 1 \\ 0 \end{bmatrix}$, and $\begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix}$.

From 1980 to 1990, the number of people in the United States who were employed in the health care industry increased by 100 percent. The number of people in the health care industry who were employed in the health care industry increased by 100 percent.

[illegible]

For the same 1000000 random trials, the mean squared error of the MCMC estimator of the probability of a particular outcome is much smaller than the error of the corresponding Monte Carlo estimator. The reason is that the MCMC estimator is based on a single sample of the Markov chain, while the Monte Carlo estimator is based on 1000000 independent samples. The standard deviation of the MCMC estimator is therefore much smaller than the standard deviation of the Monte Carlo estimator.

Fisher-Calo
Sampling & Analysis Plan
Section: 2
Revision No.: DRAFT
Date: January 15, 1988
Page: 3 of 16

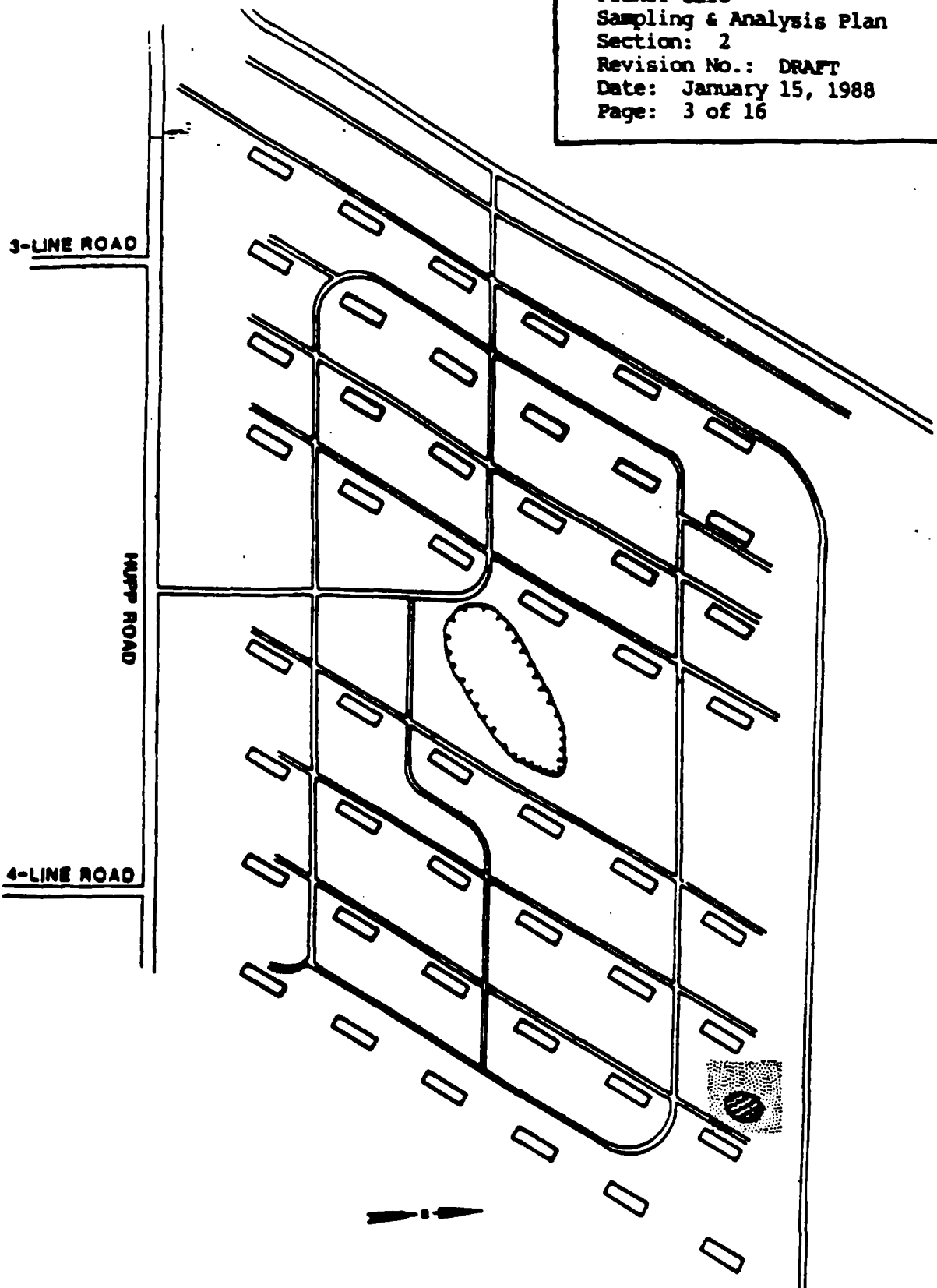


FIGURE 2-2
ADDITIONAL SUSPECTED DISPOSAL AREAS

LOCATION : VALPARAISO
 DATE OF COLLECTION : 03/09/88
 DATE OF SAMPLE RECEIPT : 03/11/88
 DATE SAMPLE REPORTED : 03/21/88
 DATE OF PRINT : 03/21/88
 ANALYST : SLK
 UNITS OF CONC. : Liquid (ug/l) ppb
 Solid (mg/Kg) ppm

Kingsbury
 2112

FOUND		RR0129 LIQUID WELL	RR0130 LIQUID WELL	RR0131 LIQUID WELL	RR0132 LIQUID WELL	RR0133 LIQUID BLANK
Dichloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Dichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
trifluoro	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
non Tetrachloride	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Dichloropropane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
chloroethylene	1.0	< D.L.	< D.L.	< D.L.	21.	< D.L.
1,2 Trichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
chloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
chloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
robenzene	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
chlorofluoroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Dichloroethylene	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Dichloroethane	1.0	< D.L.	< D.L.	< D.L.	8.3	< D.L.
1,1 Trichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
trichloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Dichloropropane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Dichloropropane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
trifluoro	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
1,2 Tetrachloroethane	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
ene Chloride	5.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Chloride	4.0	N.A.	N.A.	N.A.	N.A.	N.A.
chloroenezene	1.0	N.A.	N.A.	N.A.	N.A.	N.A.
ne	20.	< 25.	< 25.	< 25.	< 25.	< 25.
Isobutyl ketone	5.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Isobutyl ketone	5.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
e	1.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
e	1.5	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
Benzene	2.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
ene	4.0	< D.L.	< D.L.	< D.L.	< D.L.	< D.L.
l	1.0	N.A.	N.A.	N.A.	N.A.	N.A.
e	20.	N.A.	N.A.	N.A.	N.A.	N.A.

: D.L. = Detection Limit
 N.A. = Not Analyzed

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: May 16, 1988

TO: Martin R. Risch

THRU:

FROM: James A. Nowacki *JA*

SUBJECT: Kingsbury Public Water Supply
Follow-Up Investigation

Field Report

On May 5, 1988, I sampled the two remaining water supply wells of Kingsbury Utility Corporation (KUC). Mr. Dan Menefee, the IDEM Site Manager for the Kingsbury Superfund site, collected parallel enforcement samples at the same time, at the same locations. We also sampled the finished water of the water main at the point of supply inside the Cardinal Chemical Corporation building.

Mr. Stevens, Superintendent of KUC, was very helpful and assisted our samplings. The former well "A", which was contaminated with TCE, is now being reworked by Layne Northern well service company. Dan and I spoke to Andy Mago, the Layne Northern service man. Only wells "B" and "E" remain to supply water. "B" is now the primary well, "E" is the backup. Water production is switched between these two wells to maintain aquifer water levels.

Several facts of this site need to be addressed by a ground water investigation. The primary potential source of the TCE is Fisher Calo, a Superfund site. The contamination plume from Fisher Calo flows southwest towards Travis Ditch. This known plume does not flow near well "A". The contaminants in well "A" probably are from a second, unknown plume. The nearest chemical operation to well "A" is Wallace Warehouses, as per Mr. Stevens. Well "A" is southwest of the Wallace chemical warehouse.

Well "B" is the eastern most well currently supplying KUC. Well "B" is surrounded by crop fields. There are no chemical companies as near to this well as to well "A".

Part of the WWII Kingsbury base is outside of the KUC service area. Northeast of well "B" is a group of 48 buildings used as factories and warehouses. KUC does not service all of these buildings. Many have their own wells. These warehouses have more than 25 employees and may be "non-community water supplies." A change in water production in well "B" may result in ground water flow changes which may introduce materials not found earlier into well "B". Detailed sampling of the northeastern corner of the WWII base will show if contaminants are in the aquifer. The area has not been sampled according to the LaPorte County Health Department. Such a sampling event is recommended, and will be planned.

Martin R. Risch
Page 2
May 16, 1988

Lab Results

The ISBH lab reported VOC results on May 9, 1988. Metals and other organics were not reported. Well "B" contained 1.6 ppb TCE from an unknown source. This supports further sampling NE of this well. Well "E" contained no VOCs.

The distribution system sample at Cardinal Chemical contained 14 ppb TCE, 3.6 ppb 1,1,1-TCA, and 6 ppb Chloroform. Since contaminated well "A" was out of service at the time, the system could indicate either residual VOCs from use of well "A" 3 weeks ago, or possibly a cross connection problem.

JAN/em

Attachments

cc: Arnie Viere
Dan Menefee

Attachment III

Kingsford Heights Water Department
500 Park Road, Kingsford Heights, Indiana 46346

Water Supply
Background Information
and
Historical Sampling Reports



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST.
CHICAGO, ILLINOIS 60604

REPL 54712 ATTENTION OF

MAR 05 1985

Mr. Ron Cooper
Kingsford Heights Water Dept.
500 Park Road
Kingsford Heights, IN 46346

PWSID: 5246014

Dear Mr. Cooper:

You will recall I wrote to you a few months ago to explain a monitoring survey we are conducting to determine the extent of volatile synthetic organic chemicals (VOCs) in public drinking water wells. Enclosed is a copy of the laboratory results for samples that were subsequently collected from your system by our staff.

The analysis of the water sample was performed by gas chromatography/mass spectrometry, which is capable of detecting extremely low concentrations. As you will note on the sample record sheet, none of the chemicals listed were found to be present above the detection limit.

If you have any questions concerning this sampling or the laboratory analyses, please feel free to contact me or Sheila Sullivan in my office at (312) 886-5251.

Sincerely yours,

Joseph J. Harrison
Harry Von Huben, Acting Chief
Drinking Water Section

Enclosure

cc: Arnold Viere, ISBH
La Porte County Health Department

OFFICE OF DRINKING WATER
TECHNICAL SUPPORT DIVISION

H2M DATASHEET FOR VOLATILE ORGANICS ANALYSIS

INDIANA

SAMPLE NUMBER: 67344

DATE COLLECTED: June 26, 1984 M

DATE ANALYZED: SEPTEMBER 6, 1984

LOCATION: KINGSFORD HEIGHTS WATER DEPARTMENT. WELL
KINGSFORD HEIGHTS, IN.

SOURCE: RAW/GROUND

POPULATION: 1616

PWSID:
5246014

PARAMETERS	RESULTS (UG/L)
CHLOROFORM	<0.5
BROMODICHLOROMETHANE	<0.5
DIBROMOCHLOROMETHANE	<0.5
BROMOFORM	<0.5
VINYL CHLORIDE	<0.5
DICHLORODIFLUOROMETHANE	<0.5
TRICHLOROFLUOROMETHANE	<0.5
1,1-DICHLOROETHYLENE	<0.5
1,2-DICHLOROETHANE	<0.5
CIS/TRANS-1,2-DICHLOROETHYLENE	<0.5
1,1,2-TRICHLOROTRIFLUOROETHANE	<0.5
1,2-DICHLOROETHANE	<0.5
1,1,1-TRICHLOROETHANE	<1.0
CARBONTETRACHLORIDE	<0.5
1,2-DICHLOROPROPANE	<0.5
1,3-DICHLOROPROPENE	<0.5
TRANS-1,3-DICHLOROPROPENE	<0.5
TRICHLOROETHYLENE	<0.5
1,1,2-TRICHLOROETHANE	<0.5
CIS-1,3-DICHLOROPROPENE	<0.5
1,1,1,2-TETRACHLOROETHANE	<0.5
TETRACHLOROETHYLENE	<0.5
1,1,2,2-TETRACHLOROETHANE	<0.5
CHLOROBENZENE	<0.5
BENZENE	<0.5
TOLUENE	<0.5
ETHYL BENZENE	<0.5
M-XYLENE	<0.5
O/P-XYLENE	<0.5

ANALYZED BY H2M CORP, EPA METHODS 501.1 3502

RESERVATIVE=MERCURIC CHLORIDE

NO CHEMICAL REDUCING AGENT ADDED

NA=NOT ANALYZED, M=MISSING INFORMATION

OFFICE OF DRINKING WATER
TECHNICAL SUPPORT DIVISION

H2M DATASHEET FOR VOLATILE ORGANICS ANALYSIS

INDIANA

SAMPLE NUMBER: 67345

DATE COLLECTED: June 26, 1984 M
DATE ANALYZED: SEPTEMBER 18, 1984
LOCATION: KINGSFORD HEIGHTS WATER DEPT. WELL #182
KINGSFORD HEIGHTS, IN.

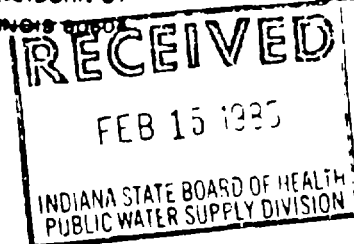
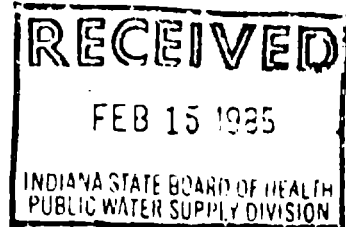
SOURCE: FINISHED/GROUND PWSID:
POPULATION: 1616 5246014

PARAMETERS	RESULTS (UG/L)
CHLOROFORM	<0.5
BROMODICHLOROMETHANE	<0.5
DIBROMOCHLOROMETHANE	<0.5
BROMOFORM	<0.5
VINYL CHLORIDE	<0.5
DICHLORODIFLUOROMETHANE	<0.5
TRICHLOROFLUOROMETHANE	<0.5
1,1-DICHLOROETHYLENE	<0.5 ✓
1,1-DICHLOROETHANE	<0.5
CIS/TRANS-1,2-DICHLOROETHYLENE	<0.5
1,1,2-TRICHLOROTRIFLUOROETHANE	<0.5
1,2-DICHLOROETHANE	<0.5
1,1,1-TRICHLOROETHANE	<1.0
CARBONTETRACHLORIDE	<0.5
1,2-DICHLOROPROPANE	<0.5
2,3-DICHLOROPROPENE	<0.5
TRANS-1,3-DICHLOROPROPENE	<0.5
TRICHLOROETHYLENE	<0.5
1,1,2-TRICHLOROETHANE	<0.5
CIS-1,3-DICHLOROPROPENE	<0.5
1,1,1,2-TETRACHLOROETHANE	<0.5
TETRACHLOROETHYLENE	<0.5
1,1,2,2-TETRACHLOROETHANE	<0.5
CHLOROBENZENE	<0.5
BENZENE	<0.5
TOLUENE	<0.5
ETHYL BENZENE	<0.5
M-XYLENE	<0.5
O/P-XYLENE	<0.5

ANALYZED BY H2M CORP, EPA METHODS 501.1 5502
PRESERVATIVE=MERCURIC CHLORIDE
NO CHEMICAL REDUCING AGENT ADDED
NA=NOT ANALYZED, M=MISSING INFORMATION



UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
230 SOUTH DEARBORN ST
CHICAGO, ILLINOIS 60601



REPLY TO ATTENTION OF

5WD-12
JD

Kingsford Heights Water Department
c/o David Draves, Town Board President
500 Park Road
Kingsford Heights, Indiana 46346

PWSID: 5246014

Dear Mr. Draves:

On January 8, 1985, a sanitary survey of the Kingsford Heights Water Department was conducted by Mr. John Dalessandro and Mr. Steven Lemon of The Environmental Protection Agency (U.S. EPA) Drinking Water Section, as part of the Agency's implementation of the Safe Drinking Water Act in Indiana.

The survey was initiated due to violations of the National Interim Primary Drinking Water Regulations, (NIPDWR) Section 141.14 regarding maximum contaminant levels of coliform bacteria during July 1984 and Sections 141.21 and/or 141.31 concerning monitoring of the water system for quality and/or the reporting of the results to Region V of the EPA in August 1984.

Mr. Ron Cooper and Mr. Ken Vlach, of the Kingsford Heights Utility provided pertinent information regarding the construction and operation of the facility, and the suggestions and recommendations listed below were conveyed at the time of the survey.

1. No structural or operational defects were noted during the survey, but a determination of free chlorine levels, as measured during the survey at the Kingsford Heights Elementary School was recorded as less than 0.01 milligrams per liter (mg/l). Depending upon water use and subsequent residence times for the chlorine to act upon any potential microbial organisms, this may or may not provide adequate protection of the water supply. "Recommended Standards for Water Works," a manual of suggested water facility practices, suggests that free chlorine levels be maintained between 0.2 mg/l and 0.5 mg/l throughout the distribution system. It is suggested that residual chlorine levels periodically be obtained from various areas of the distribution system to determine that adequate chlorine residuals are being maintained.

2. Section 141.21 of the NIPDWR requires that supplies of water for community water systems analyze for coliform bacteria for the purpose of determining compliance with Section 141.14. For systems serving populations between 1,001 and 2,500, this will require a minimum of two samples per month.

I wish to acknowledge the courtesy and consideration extended Mr. Dalessandro and Mr. Lemon by Mr. Cooper and Mr. Vlach. Should you have any questions concerning this letter or the enclosed copy of the sanitary survey, please feel free to contact Mr. John Dalessandro at (312) 886-6202.

Sincerely yours,

Harry Von Huben, Acting Chief
Drinking Water Section

Enclosures

cc: ISBH
LaPorte County Health Department
Kingsford Heights Water Department Primacy File

N/A - Not Applicable
N-Av - Not Available
Est. - Estimated

COMMUNITY WATER SUPPLY SYSTEM INSPECTION FORM

Section A - General Information

WSS Code: 5246014		Water Supply	Inspection Date: 1-8-85
System Name: Kingsford Heights Water Department		County: LaPorte	
System Address/Location: [REDACTED]			
Owner: [REDACTED]		Owner's Address (if different than above) [REDACTED]	
Owner's Phone Number: [REDACTED]		[REDACTED]	
Population Served: 1600	# Connections: 525	# Meters: 99.9% metered	
Maximum System Production: 252,000 GPD Potential ☐ Actual ☒			
Average System Production: 146,604 GPD			
System Source (check appropriate boxes) Distribution only ☐ Well(s) ☒ # of Wells 3			
Spring(s) ☐ Infiltration Gallers ☐ Surface ☐			

Additional or Qualifying Information:

Fisher - Calo chem. recycling 3 miles east

Free chl. < 0.01 mg / l

Measured at Kingsford Heights Elem. School

Total chl. 0.2 mg / l

System Personnel - Name/Classification	Level of Certification Required	Level of Certification Obtained
Ron Cooper Ken Vlach	DS/PF	DS/PF
Information Furnished by: Ron Cooper & Ken Vlach		Business Phone: 219-393-3309-Town Hall
Survey Performed by: J. Dalessandro & S. Lemon		Business Phone: 219-313-3396-Water Plant

Section A - General Information (cont.)

Simplified Flow Diagram or Schematic of the System (indicate north if appropriate)

This image shows a blank white page. A thin, dark vertical line runs along the left edge, likely representing the binding or gutter of a book. There are no markings, text, or illustrations on the page.

Section B - Source Information

[illegible]

	<u>YES</u>	<u>NO</u>	<u>N/A</u>
1. Well Strata Log available?	<u>X</u>	<u> </u>	<u> </u>
2. Well Test Pumping Log available?	<u>X</u>	<u> </u>	<u> </u>
3. Is site subject to flooding	<u> </u>	<u> </u>	<u> </u>
4. Is well located in proximity of potential source of pollution (sewers, septic tanks, sewage field, animal yards, etc.)?	<u> </u>	<u>X</u>	<u> </u>
5. Does grout depth extend to 20 feet?	<u>X</u>	<u> </u>	<u> </u>
6. Casing extend at least 12 inches above grade?	<u>X</u>	<u> </u>	<u> </u>
7. Is well properly sealed?	<u>X</u>	<u> </u>	<u> </u>
8. Well vent-screened, facing downward, 18 inches above grade?	<u>X</u>	<u> </u>	<u> </u>
9. Sample cock present on well?	<u>X</u>	<u> </u>	<u> </u>
10. Check valves, blowoff valves, and water meters maintained and operating properly?	<u>X</u>	<u> </u>	<u> </u>
11. Is upper termination of well protected?	<u>X</u>	<u> </u>	<u> </u>
12. Is lightning protection provided?	<u>X</u>	<u> </u>	<u> </u>
13. Is intake located below the maximum drawdown?	<u>X</u>	<u> </u>	<u> </u>
14. Are foot valves and/or check valves accessible for cleaning?	<u>X</u>	<u> </u>	<u> </u>

NOT APPLICABLE

Source	Number (each)	Total Capacity
Artesian Wells		
Springs		
Infiltration Galleries		

Section B - Source Information (cont.)

Is the recharge area protected?

_____ Ownership _____ Fencing X Ordinances

What is the nature of the recharge area?

_____ Agriculture _____ Industrial X Residential

	<u>YES</u>	<u>NO</u>	<u>N/A</u>
Is site subject to flooding?	_____	<u>X</u>	_____
Is collection chamber properly constructed ? (watertight, locked)	_____	_____	_____
Is supply intake adequate (6 inches above chamber floor and screened)	_____	_____	_____

Section C - Gravity Storage and Pressure Tank Reservoir

Gravity Storage Reservoir Indent.	Storage Capacity (gallons)	Date Built	Exterior Condition	Tank Material	Cathodic Protection	Tank Openings	Overflow Screened	Vent Screen
Elve.	?	?	Excellent	Steel	Yes	OK	Yes	N/A
underground reservoir	500,000	1980	Excellent					

Pressure Tank I.D.	Volume (gallons)	Age	Exterior Condition	Additional Information
Remarks, Deficiencies or Recommendations:				
NONE				

Section D - Water Distribution

Booster Pump Stations	Total Number of Stations 0	Remarks, Deficiencies and Recommendations:	
Type of Disinfection Facilities	Chlorine gas	Remarks, etc:	
System Pressure	Max. 65 psi Min. 50 psi	Remarks, etc:	
Pipe Materials in System	PVC ☐ Steel ☐ some C.I. ☒ Other ☒	Deficiencies: Transite (cement - Asbestos)	
Type of Distribution System:			
Gravity ☒ Pressure ☐ Both ☐			
Contaminant	Next Sample Date	Sample Frequency	Remarks:
Microbiological	X	4/month	
Turbidity	X	X	NOT APPLICABLE
Organics	June 1984 ?		V.O.C.
Inorganics	1988	3 yrs.	
Radiological	1989	4 yrs.	
Secondary		Daily	Iron (Raw + Finished)

Section E - General Operation and Maintenance (O & M)

Does the system keep up-to-date records? YES ☒ NO ☐

Are preventative maintenance activities routinely practiced? YES ☒ NO ☐

The importance of Cross Connection Control was discussed with the operator indicated observed cross connections above. YES ☒ NO ☐

Section F - SURFACE WATER SUPPLY INFORMATION

NOT APPLICABLE

Source (check one)	Remarks or Deficiencies
Lake ☐	
Stream ☐	

Section G - WATER TREATMENT PLANT INFORMATION

UNIT OPERATIONS	Remarks or Deficiencies
Plant Intake Structure	
Plant Location (Siting)	
Pretreatment, Raw Water Storage or Reservoirs	
Coagulation - Sedimentation	
Chemical Addition	
Filtration	
Other treatment (ion exchange, softening, reverse osmosis, etc.)	
Additional comments or remarks:	

December 19, 1978

REPORT OF SURVEY
Proposed Well Field
Kingsford Heights Public Water Supply

LOCATION: Kingsford Heights, LaPorte County, Indiana

SURVEYED BY: Ernest L. Burcham, Water Works Specialist, Indiana State Board of Health

ON: November 6, 1978

GENERAL: At the request of Mr. John D. Dritt of Commonwealth Engineers, Inc., a sanitary survey of Kingsford Heights' existing well field was conducted for the purpose of drilling three new wells to replace those presently in service. Superintendent James D. Stone was present at the time of the survey.

DESCRIPTION
OF WELL SITE: The well field is a municipally owned wooded tract of land approximately 950 feet by 1,400 feet. It is bounded on the east by Park Road and the present water treatment plant, on the north by occupied homes along Grenway Road, on the west by occupied homes along Kenilworth Road and on the south by two ballparks along Wayland Road.

COMMENTS: Sanitary sewers serving the residences along Grenway and Kenilworth Roads are located on the west and north sides of the well field. There is also an existing storm sewer cutting across the southeast corner of the tract approximately 210 feet from existing well No. 2 which will be approximately 260 feet from the proposed replacement well No. 2. A sanitary sewer approaches the existing water treatment plant from a southwestly direction.

CONDITIONS
OF APPROVAL: The well field is hereby approved to serve the Kingsford Heights public water supply, subject to the following conditions:

1. That the Town of Kingsford Heights continue ownership and control of the well field, prohibiting the construction or maintenance of any sewers, drains, privies, cesspools, septic tanks, or any other potential source of dangerous contamination within 200 feet of any of the wells.

2. That the Town of Kingsford Heights submit to this office a complete report on each well drilled. This report should include a log showing the different strata encountered and the depth of each, the depth of the pump setting, the length of screen, the static and pumping water levels, pumping capacity, log of pumping test, back-grouting, and details of how the well casing is sealed into rock if rock is encountered.
3. That complete plans and specifications for construction of the well and pumphouse, and for the disinfection equipment, connecting piping, sampling spigots, and other pertinent information be prepared by a professional engineer registered in the State of Indiana and submitted to the Indiana State Board of Health for review and approval.
4. That the finished well casing extend at least two feet above the ground level or the maximum flood level in the vicinity, whichever is higher.
5. That a meter capable of measuring the discharge from each new well be located at a convenient point in the piping system.
6. That all water pumped from each well be continuously chlorinated, pumped to and through the existing potable water treatment plant, or pumped to and through a water treatment plant that may be constructed in the future.
7. That the installation include an air line, pressure gauge and air pump, or other means of measuring the water level, as part of the finished well.

The well locations covered in this report are surveyed from the standpoint of providing protection from sources of contamination originating at or near the ground surface in the vicinity of the well. The survey does not cover the possibility of contamination from distant or underground sources.

It is not possible for this office to predict either the quantity or quality of water which may be obtained from wells on these locations. Such information can only be obtained by detailed subsurface investigation. It is suggested that an adequate pumping test on the finished well be made and recorded, and that samples of water be sent to the State Board of Health Laboratory in Indianapolis for chemical analysis.

Two samples of water of approximately one liter each collected in clean glass or plastic containers during the first two minutes of pumping, and similar samples collected at the end of the test, will give desirable information. Containers should be properly labeled to indicate

the specific well sampled, the owner, pertinent addresses, and the time and conditions of sampling. It frequently is necessary to have the above data in order to facilitate financing of the project.

Submitted by:

C. Neil Ott, Chief
Water Supply Section
Division of Sanitary Engineering
AC 317/633-0174

ELBurcham/cgp

Original: Mr. John D. Dritt

cc: Superintendent James D. Stone
Ernest L. Burcham

cgpM/8 12/18/78

Check Space

Branch		Eng. Div.	☒
Dental		EPA	☒
Other			

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division

1330 West Michigan Street

P.O. Box 1964

INDIANAPOLIS, INDIANA 46206-1964

Chemical Examination of Water

S. D. W. A.

Do not write in this space

Lab. No. C. 10854Date Rec. NOV 14 1984

Date Rep. _____

FILL IN THIS SPACE. USE SOFT PENCIL.
Indiana State Board of Health is to mail report to

(Name) Kingsford Heights

(Street) 500 Park Road.

(City or Town) Kingsford Heights, INDIANA 46346

Also mail copy of report to

(Name) _____

(Street) _____

(City or Town) _____ INDIANA

Name of Utility or Organization Water Dept. Supt. R. CooperCity or Town Kingsford HeightsCollected by: E. Burcham Date Collected 11-5-84 Hour 11:06 AWhere was sample collected? Town Hall Bottle No. LabeledName unusual conditions Dist. sys.

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment		Odor			Arsenic as As	☒	0.0015
Chlorination	☒	Color			Barium as BA	☒	<0.030
Plain sedimentation		Turbidity			Cadmium as Cd	☒	<0.002
Aerated and settled	☒	pH	☒	7.9	Chromium (Total)	☒	<0.010
Potassium Permanganate					Lead as Pb	☒	<0.010
Coagulant Aid		Hardness as CaCO ₃	☒	202	Mercury as Hg	☒	<0.0001
Prechlorinated		MO Alk. as CaCO ₃	☒	126	Selenium as Se	☒	0.0002
Filtered	☒	PP Alk. as CaCO ₃			Silver as Ag	☒	<0.010
Postchlorinated							
Zeolite softened		Iron as Fe	☒	<0.05	Fluorides (direct) as F	☒	1.0
Lime-soda softened		Manganese as Mn	☒	<0.02	Nitrates as N	☒	1.2
Coagulated and settled							
Phosphate treatment		Calcium as Ca	☒	67	Organics		
Fluoride treatment	☒	Magnesium as Mg	☒	8	Endrin		
		Sodium as Na	☒	7.7	Lindane		
		Potassium as K	☒	1.4	Methoxychlor		
					Toxaphene		
		Chlorides as Cl	☒	33	2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄	☒	55	2,4,5-TP		
pH		Phosphates as PO ₄	☒	<0.07			
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
		Sp. Cond. μ mhos/cm			Gross Beta		

REMARKS:

Check Space

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Do not write in this space

Lab. No. C. 2043

Date Rec. MAR 9 1982

Date Rep. AFR 07 1992

Branch		Eng. Div.	X
Dental		EPA	X
Other	W Steen		

Chemical Examination of Water

FILL IN THIS SPACE. USE SOFT PENCIL.

Indiana State Board of Health is to mail report to

Kingford HTs Water Dept.

(Name) 500 Park Rd

(Street) Kingsford Heights

(City or Town) 116 3116

46 346

Also mail copy of report to

Also mail copy of report to

(N

IS

(C

INDIANA

Name of Utility or Organization Water Dept. Supt. Norm Cooper

City or Town Kingsford HTS

Collected by: E. Burckham Date Collected 3-1-82 Hour 2:50 P

Where was sample collected? Plant Tap. Bottle No. 1a-b

Name unusual conditions corr. sample

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment		Odor			Arsenic as As		
Chlorination	✓	Color			Barium as BA		
Plain sedimentation		Turbidity			Cadmium as Cd		
Aerated and settled	✓	pH	✓	7.8	Chromium (Total)		
Potassium Permanganate					Lead as Pb		
Cosculant Aid		Hardness as CaCO ₃			Mercury as Hg		
Prechlorinated		MO Alk. as CaCO ₃	✓	130	Selenium as Se		
Filtered	✓	PP Alk. as CaCO ₃			Silver as Ag		
Postchlorinated	✓						
Zeolite softened		Iron as Fe			Fluorides (direct) as F		
Lime-soda softened		Manganese as Mn			Nitrates as N		
Cosculated and settled							
Phosphate treatment		Calcium as Ca CO ₃	✓	174	Organics		
Fluoride treatment	✓	Magnesium as Mg			Endrin		
		Sodium as Na	✓	6.6	Lindane		
		Potassium as K			Methoxychlor		
					Toxaphene		
		Chlorides as Cl			2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄			2,4,5-TP		
pH	6.9	Phosphates as PO ₄					
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
Temp.	9°C	Sp. Cond. μ mhos/cm			Gross Beta		
		T.D.S.	✓	250			

REMARKS.

Check Space

Branch		Eng. Div.	✓
Dental		EPA	
Other	W Steen		

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Chemical Examination of Water

Do not write in this space

Lab. No. C. 2045Date Rec. MAR 9 1982Date Rep. APR 07 1982

FILL IN THIS SPACE. USE SOFT PENCIL.

Indiana State Board of Health is to mail report to

Kingsford Hts. Water Dept
(Name)
500 Park Rd.
(Street)
Kingsford Heights INDIANA
(City or Town) 46346

Also, mail copy of report to

(Name)	
(Street)	
(City or Town)	INDIANA

Name of Utility or Organization Water Dept. Supt. Rev Cooper
City or Town Kingsford Hts.
Collected by: E. Burcham Date Collected 3-1-82 Hour 3:00 PM
Where was sample collected? Well #1 Bottle No. Lab
Name unusual conditions Raw Water

FIELD INFORMATION

LABORATORY EXAMINATION

Indicate all treatment this sample has received.		Check	Do not Check mg/l	Check	Do not Check mg/l
No Treatment	✓	Odor		Arsenic as As	
Chlorination		Color		Barium as BA	
Plain sedimentation		Turbidity		Cadmium as Cd	
Aerated and settled		pH	✓ 7.7	Chromium (Total)	
Potassium Permanganate				Lead as Pb	
Coagulant Aid		Hardness as CaCO ₃	✓ 192	Mercury as Hg	
Prechlorinated		MO Alk. as CaCO ₃	✓ 133	Selenium as Se	
Filtered		PP Alk. as CaCO ₃		Silver as Ag	
Postchlorinated					
Zeolite softened		Iron as Fe	✓ 0.54	Fluorides (direct) as F	✓ 0.1
Lime-soda softened		Manganese as Mn	✓ 0.12	Nitrates as N	0.2
Coagulated and settled					
Phosphate treatment		Calcium as Ca	✓ 53	Organics	
Fluoride treatment		Magnesium as Mg	✓ 15	Endrin	
		Sodium as Na	✓ 5.8	Lindane	
		Potassium as K	✓ 1.0	Methoxychlor	
				Toxaphene	
		Chlorides as Cl	✓ 10	2,4-D	
FIELD EXAMINATION		Sulphates as SO ₄	✓ 57	2,4,5-TP	
pH		Phosphates as PO ₄	✓ <0.09		
CO ₂ mg/l				Radionuclides	pCi/l
Iron mg/l		Alum as Al		Gross Alpha	
		Sp. Cond. μ mhos/cm		Gross Beta	

REMARKS:

Branch		Eng. Div.	✓
Dental		EPA	
Other	W Steen		

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Lab. No. C. 2047

Date Rec. MAR 9 1982

Date Rep. APR 07 1987

Chemical Examination of Water

Indiana State Board of Health is to mail report to.

(Name)

(Street)

(City or Town)

INDIANA

Also mail copy of report to

INDIANA

Name of Utility or Organization Water Dept. Supt. Ken Cooper

City or Town Kingsford HI

Collected by: E. Burcham Date Collected 3-1-12 Hour 3:05 PM

Where was sample collected? Well #3 Bottle No. 4ab

Name unusual conditions New Water

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment	✓	Odor			Arsenic as As		
Chlorination		Color			Barium as BA		
Plain sedimentation		Turbidity			Cadmium as Cd		
Aerated and settled		pH		6.7	Chromium (Total)		
Potassium Permanganate					Lead as Pb		
Coagulant Aid		Hardness as CaCO ₃	✓	194	Mercury as Hg		
Prechlorinated		MO Alk. as CaCO ₃	✓	122	Selenium as Se		
Filtered		PP Alk. as CaCO ₃			Silver as Ag		
Postchlorinated							
Zeolite softened		Iron as Fe	✓	0.26	Fluorides (direct) as F	✓	<0.1
Lime-soda softened		Manganese as Mn	✓	0.08	Nitrates as N	✓	2.0
Coagulated and settled							
Phosphate treatment		Calcium as Ca	✓	53.	Organics		
Fluoride treatment		Magnesium as Mg	✓	15.	Endrin		
		Sodium as Na	✓	5.3	Lindane		
		Potassium as K	✓	1.6	Methoxychlor		
					Toxaphene		
		Chlorides as Cl	✓	12.	2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄	✓	60.	2,4,5-TP		
pH		Phosphates as PO ₄	✓	<0.09			
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
		Sp Cond. μ mhos/cm			Gross Beta		

REMARKS.

Branch		Eng. Div.	✓
Dental		EPA	
Other	W Steen		

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Lab. No. C. 2046
Date Rec. MAR 9 1982
Date Rep. 10-17-1982

FILL IN THIS SPACE. USE SOFT PENCIL.
Indiana State Board of Health is to mail report to
Kingsford Hts. Water Dept.
(Name)
500 Park Rd
(Street)
Kingsford Heights, INDIANA
(City or Town) *46346*

Also, mail copy of report to

[REDACTED]

INDIANA

Name unusual conditions Raw Water

FIELD INFORMATION		LABORATORY EXAMINATION					
Indicate all treatment this sample has received.			Check	Do not Check mg/l		Check	Do not Check mg/l
No Treatment	✓	Odor			Arsenic as As		
Chlorination		Color			Barium as BA		
Plain sedimentation		Turbidity			Cadmium as Cd		
Aerated and settled		pH	✓	7.8	Chromium (Total)		
Potassium Permanganate					Lead as Pb		
Coagulant Aid		Hardness as CaCO ₃	✓	197	Mercury as Hg		
lorinated		MO Aik. as CaCO ₃	✓	133	Selenium as Se		
Filtered		PP Aik. as CaCO ₃			Silver as Ag		
Postchlorinated							
Zeolite softened		Iron as Fe	✓	0.33	Fluorides (direct) as F	✓	0.1
Lime-soda softened		Manganese as Mn	✓	0.09	Nitrates as N		1.1
Coagulated and settled							
Phosphate treatment		Calcium as Ca	✓	54	Organics		
Fluoride treatment		Magnesium as Mg	✓	15	Endrin		
		Sodium as Na	✓	5.3	Lindane		
		Potassium as K	✓	1.1	Methoxychlor		
					Toxaphene		
		Chlorides as Cl	✓	12	2,4-D		
FIELD EXAMINATION		Sulphates as SO ₄	✓	55	2,4,5-TP		
pH		Phosphates as PO ₄	✓	<0.09			
CO ₂ mg/l					Radionuclides		pCi/l
Iron mg/l		Alum as Al			Gross Alpha		
		Sp Cond. μ mhos/cm			Gross Beta		

REMARKS:

Check Space

Branch		Eng. Div.	X
Dental		EPA	X
Other	W Steen		

INDIANA STATE BOARD OF HEALTH

Water & Sewage Laboratory Division
1330 West Michigan Street
INDIANAPOLIS, INDIANA 46206

S. D. W. H.
Chemical Examination of Water

Do not write in this space

Lab. No. C. 2049

Date Rec. MAR 9 1982

Date Rep. APR 07 1982

FILL IN THIS SPACE. USE SOFT PENCIL.

Indiana State Board of Health is to mail report to

Kingsford Hts. Water Dept.

(Name)

500 Park Rd

(Street)

Kingsford Heights, INDIANA

(City or Town)

46346

Also, mail copy of report to

Name of Utility or Organization Water Dept.

Supt. Rex Cooper

City or Town Kingsford Hts

Collected by: E. Burcham

Date Collected 3-1-82

Hour 3:20 P

Where was sample collected? Town Hall

Bottle No. 5 abcd

Name unusual conditions Dist. sys

FIELD INFORMATION

LABORATORY EXAMINATION

Indicate all treatment this sample has received.				Check	Do not Check mg/l			Check	Do not Check mg/l
Check									
No Treatment		Odor				Arsenic as As	✓	0.0015	
Chlorination	✓	Color				Barium as BA	✓	0.040	
Plain sedimentation		Turbidity				Cadmium as Cd	✓	<0.002	
Aerated and settled	✓	pH		✓	7.7	Chromium (Total)	✓	<0.010	
Potassium Permanganate						Lead as Pb	✓	0.010	
Coagulant Aid		Hardness as CaCO ₃		✓	196	Mercury as Hg	✓	<0.0001	
orinated		MO Alk as CaCO ₃		✓	128	Selenium as Se	✓	<0.0002	
Filtered	✓	PP Alk as CaCO ₃				Silver as Ag	✓	<0.010	
Prechlorinated	✓								
Zeolite softened		Iron as Fe		✓	0.07	Fluorides (direct) as F	✓	1.2	
Lime-soda softened		Manganese as Mn		✓	<0.02	Nitrates as N	✓	1.5	
Coagulated and settled									
Phosphate treatment		Calcium as Ca		✓	54	Organics			
Fluoride treatment	✓	Magnesium as Mg		✓	15	Endrin			
		Sodium as Na		✓	6.7	Lindane			
		Potassium as K		✓	1.3	Methoxychlor			
						Toxaphene			
		Chlorides as Cl		✓	12	2,4-D			
FIELD EXAMINATION		Sulphates as SO ₄		✓	58	2,4,6-TP			
pH		Phosphates as PO ₄		✓	<0.09				
CO ₂ mg/l						Radionuclides			pCi/l
Iron mg/l		Alum as Al				Gross Alpha			
		Sp Cond. μ mhos/cm				Gross Beta			

REMARKS.

Water & Sewage Laboratory Division
1440 West Michigan Street
INDIANAPOLIS, INDIANA 46206

Do not write in this space

Lab. No. C 4007
Date Rec. JUN 19 1979
Date Rep. AUG 3 1979

SANITARY EXAMINATION OF WATER

SDWA

FILL IN THIS SPACE. USE SOFT PENCIL.

Indiana State Board of Health is to mail report to

INDIANAPOLIS HEALTH DEPT.

500 IARV ROAD

INDIANAPOLIS, INDIANA

46206

Also, mail copy of report to

FILL IN ALL NECESSARY SPACES. USE SOFT PENCIL

Name of Utility or Organization WATER DEPT. Supt. JAMES STONE

Collected by E. F. KCHAS Date Collected JUNE 1979 Hour

How was sample collected? CO. 1. SAMPLE DIGN. SYS Bottle No.

Are there any unusual conditions? RADIO ACTIVITY

FIELD INFORMATION

LABORATORY EXAMINATION

Indicate all treatment this sample has received.

Check

Check

Do not
check

Mg./L.

Coagulation ☒ Endrin
Filtration ☒ Lindane
Sedimentation ☒ Methoxychlor
Flow and settled ☒ Toxaphene
Filtration ☒ 2,4-D
Filtration ☒ 2,4,5-TP

Radioactivity
Gross Alpha
Gross Beta

DC/L

-0.31

2.07

Coliforms Confirmed

M.P.N. per 100 ML

Standard Plate Count

35°C. Per 1 ML

Bacteriologist

Chemist

J. Long

Chemical Results are expressed in terms of Mg./L. except for Odor, pH and Sediment.

Remarks:

Collected

4-25-78

12-25-78

3-25-79

6-15-79

CC. EPA

Attachment V

Correspondence Sent to the
Private Well Homeowners and
Kingsbury Utilities Corporation



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

OCT 03 1987

Re: [REDACTED]

Well Water Quality Survey
Kingsford Heights--Tracy Area
LaPorte County

[REDACTED]

On June 26, 1987, representatives of the Indiana Department of Environmental Management (IDEM) visited your business to collect well water samples. These samples were analyzed for volatile organic chemicals by EMS Laboratories, Inc., of Indianapolis.

The reason the survey was conducted was to determine if operations in the Kingsbury Industrial Park were having any impact on the well water quality in the immediate area.

No chemicals were detected in any of the samples taken. The letters "ND" on the sample analysis sheets stand for "Not Detected."

Enclosed you will find the results of the survey. Page Nos. 2 and 3 were removed from the report so that addresses and personal information would not be distributed to anyone else, since all participants requested copies of the report.

The results for your water samples are listed under Control No. C2397 and C2401, Sample No. 2-A, 2-B, 2-AD and 2-BD, and Site No. 2 on the map.

Thank you for your cooperation and participation in the survey; and if you should have any questions, please contact Mr. Michael E. Sickels of the IDEM, Hazardous Waste Management Branch, at AC 317/232-3406.

Very truly yours,

Thomas L. Russell

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MES/rmw

Enclosure

cc: LaPorte County Health Department
Mr. Ted F. Warner



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 7-232-8603

OCT 05 1987

Re: [REDACTED]
Well Water Quality Survey
Kingsford Heights--Tracy Area
LaPorte County

Dear [REDACTED]

On June 26, 1987, representatives of the Indiana Department of Environmental Management (IDEM) visited your residence to collect well water samples. These samples were analyzed for volatile organic chemicals by EMS Laboratories, Inc., of Indianapolis.

The reason the survey was conducted was to determine if operations in the Kingsbury Industrial Park were having any impact on the well water quality in the immediate area.

No chemicals were detected in any of the samples taken. The letters "ND" on the sample analysis sheets stand for "Not Detected."

Enclosed you will find the results of the survey. Page Nos. 2 and 3 were removed from the report so that addresses and personal information would not be distributed to anyone else, since all participants requested copies of the report.

The results for your water samples are listed under Control No. C2398, Sample Nos. 3-A and 3-B, and Site No. 3 on the map.

Thank you for your cooperation and participation in the survey; and if you should have any questions, please contact Mr. Michael E. Sickels of the IDEM, Hazardous Waste Management Branch, at AC 317/232-3406.

Very truly yours,

Thomas L. Russell

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MES/rmw

Enclosure

cc: LaPorte County Health Department
Mr. Ted F. Warner



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

OCT 05 1987

Re: [REDACTED]
Well Water Quality Survey
Kingsford Heights--Tracy Area
LaPorte County

Dear [REDACTED]

On June 26, 1987, representatives of the Indiana Department of Environmental Management (IDEM) visited your residence to collect well water samples. These samples were analyzed for volatile organic chemicals by EMS Laboratories, Inc., of Indianapolis.

The reason the survey was conducted was to determine if operations in the Kingsbury Industrial Park were having any impact on the well water quality in the immediate area.

No chemicals were detected in any of the samples taken. The letters "ND" on the sample analysis sheets stand for "Not Detected."

Enclosed you will find the results of the survey. Page Nos. 2 and 3 were removed from the report so that addresses and personal information would not be distributed to anyone else, since all participants requested copies of the report.

The results for your water samples are listed under Control No. C2399, Sample No. 4-A and 4-B, and Site No. 4 on the map.

Thank you for your cooperation and participation in the survey; and if you should have any questions, please contact Mr. Michael E. Sickels of the IDEM, Hazardous Waste Management Branch, at AC 317/232-3406.

Very truly yours,

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MES/rmw

Enclosure

cc: LaPorte County Health Department
Mr. Ted F. Warner

11/16/87



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street

P.O. Box 6015

Indianapolis 46206-6015

Telephone 317-232-8603

OCT 05 1987

Re:

Well Water Quality Survey
Kingsford Heights--Tracy Area
LaPorte County

Dear

On June 26, 1987, representatives of the Indiana Department of Environmental Management (IDEM) visited your residence to collect well water samples. These samples were analyzed for volatile organic chemicals by EMS Laboratories, Inc., of Indianapolis.

The reason the survey was conducted was to determine if operations in the Kingsbury Industrial Park were having any impact on the well water quality in the immediate area.

No chemicals were detected in any of the samples taken. The letters "ND" on the sample analysis sheets stand for "Not Detected."

Enclosed you will find the results of the survey. Page Nos. 2 and 3 were removed from the report so that addresses and personal information would not be distributed to anyone else, since all participants requested copies of the report.

The results for your water samples are listed under Control No. C2400, Sample Nos. 5-A and 5-B, and Site No. 5 on the map.

Thank you for your cooperation and participation in the survey; and if you should have any questions, please contact Mr. Michael E. Sickels of the IDEM, Hazardous Waste Management Branch, at AC 317/232-3406.

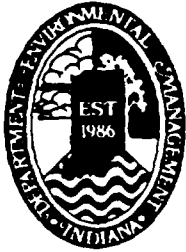
Very truly yours,

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MES/rmw

Enclosure

cc: LaPorte County Health Department
Mr. Ted F. Warner



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

QCI 05 1987

Mr. Robert Stevens, Manager
Kingsbury Utilities
P.O. Box 119
LaPorte, Indiana 46350

Re: Well Water Quality Survey
Kingsford Heights--Tracy Area
LaPorte County

Dear Mr. Stevens:

On June 26, 1987, representatives of the Indiana Department of Environmental Management (IDEM) visited your office to collect well water samples. These samples were analyzed for volatile organic chemicals by EMS Laboratories, Inc., of Indianapolis.

The reason the survey was conducted was to determine if operations in the Kingsbury Industrial Park were having any impact on the well water quality in the immediate area, or contaminating the water supply lines servicing the industrial park.

No chemicals were detected in any of the samples taken. The letters "ND" on the sample analysis sheets stand for "Not Detected."

Enclosed you will find the results of the survey. Page Nos. 2 and 3 were removed from the report so that addresses and personal information would not be distributed to anyone else, since all participants requested copies of the report.

The results for your water samples are listed under Control No. C2385, Sample Nos. 1-A and 1-B, and Site No. 1 on the map.

Thank you for your cooperation and participation in the survey; and if you should have any questions, please contact Mr. Michael E. Sickels of the IDEM, Hazardous Waste Management Branch, at AC 317/232-3406.

Very truly yours,

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MES/rmw
Enclosure
cc: LaPorte County Health Department
Mr. Ted F. Warner