



State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor  
George E. Meyer, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Annex  
4041 N. Richards Street, Box 12436  
Milwaukee, WI 53212-0436  
TELEPHONE 414-229-0800  
FAX 414-229-0810

August 27, 1997

File: Ozaukee/Grafton/Pvt#IZ489

Aloys and Rita Hospel  
1725 Manchester Drive  
Grafton, WI 53012

WATER SAMPLE RESULTS

Re: Testing of Treatment Unit Effectiveness on Well Serving 1725 Manchester Drive

Dear Mr. and Mrs. Hospel:

Thank you for your cooperation in the sampling of your well and treatment unit by the state Division of Health and this department on July 2nd and again July 14. A total of 67 chemicals were tested as shown on the enclosed lab reports.

On July 2 two samples were collected: One of the "raw water" from the well, and another of the "finished water" after both the air stripping and carbon polishing treatment units. The results were:

Chemical	Raw Water	Finished Water	Max Allowed
Vinyl Chloride	18.0	ND	0.18
1,1-Dichloroethane	44.0	ND	5.0
1,1-Dichloroethylene	2.9	ND	850.0
cis-1,2-Dichloroethylene	150.0	ND	70.0
1,1,1-Trichloroethane	16.0	ND	200.0
Trichloroethylene	68.0	ND	5.0
<i>Methyl Tert Butyl Ether</i>	ND	1.3	60.0

Concentrations expressed in micrograms per liter (ug/l)

The treatment unit removed vinyl chloride and all other VOCs which were present in the raw water to non-detectable levels (ND). However, and very puzzling, the air stripper seemed to introduce a chemical (*in italics*) into the finished water which was not present in the raw water. This chemical is generally associated with gasoline. Fortunately the level was within safe drinking water standards. There are several possible explanations: 1) The basement air being used to mix with the water contained this chemical vapor (2) Laboratory error (3) The air stripper components contain petroleum residues. Chuck Warzecha of the Division of Health and I resampled the water on July 14 from three points: the raw water; the water after air stripping but before carbon polishing; and the finished water. The results appear in the following table:

Chemicals*	Raw	Air Only	Air & Carbon	Max Allowed
Vinyl Chloride	43.0	0.72	ND	0.18
DCDFmethane	ND	0.97	ND	1000.0
1,1-DCA	48.0	3.1	ND	5.0
1,1-DCE	5.8	ND	ND	850.0
cis-1,2-DCE	190.0	15.0	ND	70.0
trans-1,2-DCE	1.4	ND	ND	100.0
1,1,1-TCA	23.0	1.0	ND	200.0
TCE	82.0	4.4	ND	5.0

\*Abbreviated chemicals names used here correspond to full names in previous table.  
Concentrations expressed in micrograms per liter (ug/l)

Again, the finished water contained no detectable chemicals (ND) despite the concentrations of several VOCs in the raw water being significantly higher than the sample collected July 2. At these higher concentrations some chemicals were not completely removed by air-stripping only, but were removed by the carbon. No trace of the phantom chemical Methyl Tert Butyl Ether, which appeared on July 2, was found. A trace of the chemical DCDFmethane (Freon) was detected in this air-stripped sample, probably due to slight variation in analytical sensitivity at this low concentration.

If you have any questions please call me at (414)229-0828 in Milwaukee, or Chuck Warzecha with the Division of Health in Madison at (608)267-3732.

Sincerely,

  
Chad Czarkowski

Drinking Water and Groundwater Specialist

c:Private DG/2

Chuck Warzecha

Glen Schleutter - DOC

Robert Schaefer - DG/2

Sharon Schaver

John Feeney

Schaefer Bros. Pump Co.

North American Aqua

EPA

Village of Grafton

Town of Grafton

file

7/2/97

HOSPEL-raw

State Laboratory of Hygiene  
University of Wisconsin Center for Health Sciences  
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

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Environmental Science Section (608) 262-2797 DNR LAB ID 113133790  
Organic chemistry (#1 of 5 on 07/22/97, unseen)

Id: Point/Well/...: IZ489 Field #: RAW Route: WS21  
Collection Date: 07/02/97 Time: 11:30 County: 46 (Ozaukee)  
From: HOSPEL, 1725 MANCHESTER, GRAFTON  
Description: SAMPLE TAP (PRIOR TO AIR STRIPPER TREATMENT)  
To: WDNR / SED  
PO BOX 12436 Source: Private  
MILWAUKEE, WI 53212  
Account number: DG015 Collected by: CZARKOWSKI  
Date Received: 07/05/97 Labslip #: OI000067 Reported: 07/21/97  
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---- test: TEMPERATURE - ICED - 0950  
TEMPERATURE - ICED

ICED

---- test: VOCS IN WATER BY PURGE AND TRAP - EPA METHOD 8021

ACETONE	ND (LOD=10. UG/L)
BENZENE	ND (LOD=0.30 UG/L)
BROMOBENZENE	ND (LOD=0.30 UG/L)
BROMOCHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMODICHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMOFORM	ND (LOD=0.50 UG/L)
BROMOMETHANE	ND (LOD=0.50 UG/L)
N-BUTYLBENZENE	ND (LOD=0.50 UG/L)
SEC-BUTYLBENZENE	ND (LOD=0.50 UG/L)
TERT-BUTYLBENZENE	ND (LOD=0.50 UG/L)
CARBON DISULFIDE	ND (LOD=10. UG/L)
CARBON TETRACHLORIDE	ND (LOD=0.50 UG/L)
CHLOROBENZENE	ND (LOD=0.30 UG/L)
CHLORODIBROMOMETHANE	ND (LOD=0.50 UG/L)
CHLOROETHANE	ND (LOD=0.50 UG/L)
CHLOROFORM	ND (LOD=0.50 UG/L)
CHLOROMETHANE	ND (LOD=0.50 UG/L)
2-CHLOROTOLUENE	ND (LOD=0.50 UG/L)
4-CHLOROTOLUENE	ND (LOD=0.30 UG/L)
1,2-DIBROMO-3-CHLOROPROPANE	ND (LOD=0.50 UG/L)
1,2-DIBROMOETHANE (EDB)	ND (LOD=0.50 UG/L)
DIBROMOMETHANE	ND (LOD=0.30 UG/L)
1,2-DICHLOROETHANE	ND (LOD=0.30 UG/L)
1,3-DICHLOROETHANE	ND (LOD=0.30 UG/L)
1,4-DICHLOROETHANE	ND (LOD=0.30 UG/L)
DICHLORODIFLUOROMETHANE	ND (LOD=0.30 UG/L)
1,1-DICHLOROETHANE	+ 44. UG/L
1,2-DICHLOROETHANE	ND (LOD=0.50 UG/L)
1,1-DICHLOROETHYLENE	+ 2.9 UG/L
CIS-1,2-DICHLOROETHYLENE	+ 150. UG/L

State Laboratory of Hygiene  
University of Wisconsin Center for Health Sciences  
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

Environmental Science Section (608) 262-2797  
... continuing Labslip # OI000067, Field # RAW

DNR LAB\_ID 113133790

TRANS-1,2-DICHLOROETHYLENE	ND (LOD=0.30 UG/L)
1,2-DICHLOROPROPANE	ND (LOD=0.50 UG/L)
1,3-DICHLOROPROPANE	ND (LOD=0.50 UG/L)
2,2-DICHLOROPROPANE	ND (LOD=0.30 UG/L)
1,1-DICHLOROPROPENE	ND (LOD=0.50 UG/L)
CIS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L)
TRANS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L)
DIISOPROPYL ETHER	ND (LOD=10. UG/L)
ETHYLBENZENE	ND (LOD=0.30 UG/L)
HEXACHLOROBUTADIENE	ND (LOD=0.30 UG/L)
ISOPROPYLBENZENE	ND (LOD=0.50 UG/L)
P-ISOPROPYLTOLUENE	ND (LOD=0.50 UG/L)
METHYL ETHYL KETONE (MEK)	ND (LOD=10. UG/L)
METHYL ISOBUTYL KETONE (MIBK)	ND (LOD=10. UG/L)
METHYL-TERT-BUTYL ETHER (MTBE)	ND (LOD=1.0 UG/L)
METHYLENE CHLORIDE	ND (LOD=0.50 UG/L)
NAPHTHALENE	ND (LOD=0.30 UG/L)
N-PROPYLBENZENE	ND (LOD=0.50 UG/L)
STYRENE	ND (LOD=0.50 UG/L)
1,1,1,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L)
1,1,2,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L)
TETRACHLOROETHYLENE	ND (LOD=0.50 UG/L)
TETRAHYDROFURAN (THF)	ND (LOD=10. UG/L)
TOLUENE	ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,2,4-TRICHLOROBENZENE	ND (LOD=0.50 UG/L)
1,1,1-TRICHLOROETHANE	+ 16. UG/L
1,1,2-TRICHLOROETHANE	ND (LOD=0.50 UG/L)
TRICHLOROETHYLENE	+ 68. UG/L
TRICHLOROFLUOROMETHANE	ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROPROPANE	ND (LOD=0.50 UG/L)
1,1,2-TRICHLOROTRIFLUOROETHANE	ND (LOD=0.50 UG/L)
1,2,4-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L)
1,3,5-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L)
VINYL CHLORIDE	+ 18. UG/L
M/P-XYLENE	ND (LOD=1.0 UG/L)
O-XYLENE	ND (LOD=0.30 UG/L)
VOCS IN WATER BY PURGE & TRAP-PREP-EPA METHOD 8021	C

--- Footnotes ---

+: Positive results are prefixed by a plus sign.



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465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

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Environmental Science Section (608) 262-2797 DNR LAB ID 113133790  
... continuing Labslip # OI000068, Field # FINISHED

TRANS-1,2-DICHLOROETHYLENE	ND (LOD=0.30 UG/L) #1
1,2-DICHLOROPROPANE	ND (LOD=0.50 UG/L) #1
1,3-DICHLOROPROPANE	ND (LOD=0.50 UG/L) #1
2,2-DICHLOROPROPANE	ND (LOD=0.30 UG/L) #1
1,1-DICHLOROPROPENE	ND (LOD=0.50 UG/L) #1
CIS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L) #1
TRANS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L) #1
DIISOPROPYL ETHER	ND (LOD=10. UG/L) #1
ETHYLBENZENE	ND (LOD=0.30 UG/L) #1
HEXACHLOROBUTADIENE	ND (LOD=0.30 UG/L) #1
ISOPROPYLBENZENE	ND (LOD=0.50 UG/L) #1
P-ISOPROPYLTOLUENE	ND (LOD=0.50 UG/L) #1
METHYL ETHYL KETONE (MEK)	ND (LOD=10. UG/L) #1
METHYL ISOBUTYL KETONE (MIBK)	ND (LOD=10. UG/L) #1
METHYL-TERT-BUTYL ETHER (MTBE)	+ 1.3 UG/L #1
detected between 1.0 (LOD) and 3.3 (LOQ) UG/L	
METHYLENE CHLORIDE	ND (LOD=0.50 UG/L) #1
NAPHTHALENE	ND (LOD=0.30 UG/L) #1
N-PROPYLBENZENE	ND (LOD=0.50 UG/L) #1
STYRENE	ND (LOD=0.50 UG/L) #1
1,1,1,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L) #1
1,1,2,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L) #1
TETRACHLOROETHYLENE	ND (LOD=0.50 UG/L) #1
TETRAHYDROFURAN (THF)	ND (LOD=10. UG/L) #1
TOLUENE	ND (LOD=0.50 UG/L) #1
1,2,3-TRICHLOROBENZENE	ND (LOD=0.30 UG/L) #1
1,2,4-TRICHLOROBENZENE	ND (LOD=0.50 UG/L) #1
1,1,1-TRICHLOROETHANE	ND (LOD=0.50 UG/L) #1
1,1,2-TRICHLOROETHANE	ND (LOD=0.50 UG/L) #1
TRICHLOROETHYLENE	ND (LOD=0.30 UG/L) #1
TRICHLOROFLUOROMETHANE	ND (LOD=0.50 UG/L) #1
1,2,3-TRICHLOROPROPANE	ND (LOD=0.50 UG/L) #1
1,1,2-TRICHLOROTRIFLUOROETHANE	ND (LOD=0.50 UG/L) #1
1,2,4-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L) #1
1,3,5-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L) #1
VINYL CHLORIDE	ND (LOD=0.50 UG/L) #1
M/P-XYLENE	ND (LOD=1.0 UG/L) #1
O-XYLENE	ND (LOD=0.30 UG/L) #1
VOCS IN WATER BY PURGE & TRAP-PREP-EPA METHOD 8021	C

--- Footnotes ---

+: Positive results are prefixed by a plus sign.

Remark #1: SAMPLE VIALS CONTAIN A LARGE AIR SPACE.

7/14/97  
HOSPEL-RAW

State Laboratory of Hygiene  
University of Wisconsin Center for Health Sciences  
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

Environmental Science Section  
Organic chemistry

(608) 262-2797

DNR LAB ID 113133790

Id: Point/Well/...: IZ489 Field #: H03 Route:

Collection Date: 07/14/97 Time: 10:45 County: 46 (Ozaukee)

From: 1725 MANCHESTER DR., GRAFTON, WI, 53703

Description: HOSPEL WELL - RAW WATER SAMPLE

To: CHUCK WARZECHA

1414 E. WASHINGTON RM 96  
MADISON, WI 53703

Source: Private

Account number: DH036

Collected by: CHUCK WARZECHA

Date Received: 07/15/97

Labslip #: OI000139

Reported: 07/24/97

---- test: TEMPERATURE - ICED - 0950  
TEMPERATURE - ICED

ICED

---- test: VOCs IN WATER BY PURGE AND TRAP - EPA METHOD 8021

ACETONE	ND (LOD=10. UG/L)
BENZENE	ND (LOD=0.30 UG/L)
BROMOBENZENE	ND (LOD=0.30 UG/L)
BROMOCHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMODICHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMOFORM	ND (LOD=0.50 UG/L)
BROMOMETHANE	ND (LOD=0.50 UG/L)
N-BUTYLBENZENE	ND (LOD=0.50 UG/L)
SEC-BUTYLBENZENE	ND (LOD=0.50 UG/L)
TERT-BUTYLBENZENE	ND (LOD=0.50 UG/L)
CARBON DISULFIDE	ND (LOD=10. UG/L)
CARBON TETRACHLORIDE	ND (LOD=0.50 UG/L)
CHLOROBENZENE	ND (LOD=0.30 UG/L)
CHLORODIBROMOMETHANE	ND (LOD=0.50 UG/L)
CHLOROETHANE	ND (LOD=0.50 UG/L)
CHLOROFORM	ND (LOD=0.50 UG/L)
CHLOROMETHANE	ND (LOD=0.50 UG/L)
2-CHLOROTOLUENE	ND (LOD=0.50 UG/L)
4-CHLOROTOLUENE	ND (LOD=0.30 UG/L)
1,2-DIBROMO-3-CHLOROPROPANE	ND (LOD=0.50 UG/L)
1,2-DIBROMOETHANE (EDB)	ND (LOD=0.50 UG/L)
DIBROMOMETHANE	ND (LOD=0.30 UG/L)
1,2-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,3-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,4-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
DICHLORODIFLUOROMETHANE	ND (LOD=0.30 UG/L)
1,1-DICHLOROETHANE	+ 48. UG/L
1,2-DICHLOROETHANE	ND (LOD=0.50 UG/L)
1,1-DICHLOROETHYLENE	+ 5.8 UG/L
CIS-1,2-DICHLOROETHYLENE	+ 190. UG/L

State Laboratory of Hygiene  
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 465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

Environmental Science Section

(608) 262-2797

DNR LAB ID 113133790

... continuing Labslip # OI000139,

Field # H03

TRANS-1,2-DICHLOROETHYLENE	+ 1.4	UG/L
1,2-DICHLOROPROPANE		ND (LOD=0.50 UG/L)
1,3-DICHLOROPROPANE		ND (LOD=0.50 UG/L)
2,2-DICHLOROPROPANE		ND (LOD=0.30 UG/L)
1,1-DICHLOROPROPENE		ND (LOD=0.50 UG/L)
CIS-1,3-DICHLOROPROPENE		ND (LOD=0.30 UG/L)
TRANS-1,3-DICHLOROPROPENE		ND (LOD=0.30 UG/L)
DIISOPROPYL ETHER		ND (LOD=10. UG/L)
ETHYLBENZENE		ND (LOD=0.30 UG/L)
HEXACHLOROBUTADIENE		ND (LOD=0.30 UG/L)
ISOPROPYLBENZENE		ND (LOD=0.50 UG/L)
P-ISOPROPYLTOLUENE		ND (LOD=0.50 UG/L)
METHYL ETHYL KETONE (MEK)		ND (LOD=10. UG/L)
METHYL ISOBUTYL KETONE (MIBK)		ND (LOD=10. UG/L)
METHYL-TERT-BUTYL ETHER (MTBE)		ND (LOD=1.0 UG/L)
METHYLENE CHLORIDE		ND (LOD=0.50 UG/L)
NAPHTHALENE		ND (LOD=0.30 UG/L)
N-PROPYLBENZENE		ND (LOD=0.50 UG/L)
STYRENE		ND (LOD=0.50 UG/L)
1,1,1,2-TETRACHLOROETHANE		ND (LOD=0.30 UG/L)
1,1,2,2-TETRACHLOROETHANE		ND (LOD=0.30 UG/L)
TETRACHLOROETHYLENE		ND (LOD=0.50 UG/L)
TETRAHYDROFURAN (THF)		ND (LOD=10. UG/L)
TOLUENE		ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROBENZENE		ND (LOD=0.30 UG/L)
1,2,4-TRICHLOROBENZENE		ND (LOD=0.50 UG/L)
1,1,1-TRICHLOROETHANE	+ 23.	UG/L
1,1,2-TRICHLOROETHANE		ND (LOD=0.50 UG/L)
TRICHLOROETHYLENE	+ 82.	UG/L
TRICHLOROFLUOROMETHANE		ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROPROPANE		ND (LOD=0.50 UG/L)
1,1,2-TRICHLOROTRIFLUOROETHANE		ND (LOD=0.50 UG/L)
1,2,4-TRIMETHYLBENZENE		ND (LOD=0.50 UG/L)
1,3,5-TRIMETHYLBENZENE		ND (LOD=0.50 UG/L)
VINYL CHLORIDE	+ 43.	UG/L
M/P-XYLENE		ND (LOD=1.0 UG/L)
O-XYLENE		ND (LOD=0.30 UG/L)
VOCS IN WATER BY PURGE & TRAP-PREP-EPA METHOD 8021		C

--- Footnotes ---

+: Positive results are prefixed by a plus sign.



7/14/97

HOSPEL - AIR STRIPPED ONLY

State Laboratory of Hygiene  
University of Wisconsin Center for Health Sciences  
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director S.L. Inhorn, M.D., Medical Director

Environmental Science Section (608) 262-2797 DNR LAB ID 113133790  
Organic chemistry

Id: Point/Well/...: IZ489 Field #: H04 Route:  
Collection Date: 07/14/97 Time: 10:55 County: 46 (Ozaukee)  
From: 1725 MANCHESTER DR. GRAFTON  
Description: HOSPEL WELL - AFTER STRIPPER - BEFORE CARBON  
To: CHUCK WARZECHA  
1414 E. WASHINGTON RM 96 Source: Private  
MADISON, WI 53703  
Account number: DH036 Collected by: CHUCK WARZECHA  
Date Received: 07/15/97 Labslip #: OI000140 Reported: 07/24/97

---- test: TEMPERATURE - ICED - 0950  
TEMPERATURE - ICED

ICED

---- test: VOCs IN WATER BY PURGE AND TRAP - EPA METHOD 8021

ACETONE	ND (LOD=10. UG/L)
BENZENE	ND (LOD=0.30 UG/L)
BROMOBENZENE	ND (LOD=0.30 UG/L)
BROMOCHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMODICHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMOFORM	ND (LOD=0.50 UG/L)
BROMOMETHANE	ND (LOD=0.50 UG/L)
N-BUTYLBENZENE	ND (LOD=0.50 UG/L)
SEC-BUTYLBENZENE	ND (LOD=0.50 UG/L)
TERT-BUTYLBENZENE	ND (LOD=0.50 UG/L)
CARBON DISULFIDE	ND (LOD=10. UG/L)
CARBON TETRACHLORIDE	ND (LOD=0.50 UG/L)
CHLOROBENZENE	ND (LOD=0.30 UG/L)
CHLORODIBROMOMETHANE	ND (LOD=0.50 UG/L)
CHLOROETHANE	ND (LOD=0.50 UG/L)
CHLOROFORM	ND (LOD=0.50 UG/L)
CHLOROMETHANE	ND (LOD=0.50 UG/L)
2-CHLOROTOLUENE	ND (LOD=0.50 UG/L)
4-CHLOROTOLUENE	ND (LOD=0.30 UG/L)
1,2-DIBROMO-3-CHLOROPROPANE	ND (LOD=0.50 UG/L)
1,2-DIBROMOETHANE (EDB)	ND (LOD=0.50 UG/L)
DIBROMOMETHANE	ND (LOD=0.30 UG/L)
1,2-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,3-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,4-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
DICHLORODIFLUOROMETHANE	+ 0.97 UG/L
detected between 0.30 (LOD) and 1.0 (LOQ) UG/L	
1,1-DICHLOROETHANE	+ 3.1 UG/L
1,2-DICHLOROETHANE	ND (LOD=0.50 UG/L)
1,1-DICHLOROETHYLENE	ND (LOD=0.50 UG/L)

State Laboratory of Hygiene  
 University of Wisconsin Center for Health Sciences  
 465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director S.L. Inhorn, M.D., Medical Director

Environmental Science Section (608) 262-2797 DNR LAB ID 113133790  
 ... continuing Labslip # OI000140, Field # H04

CIS-1,2-DICHLOROETHYLENE	+ 15.	UG/L
TRANS-1,2-DICHLOROETHYLENE		ND (LOD=0.30 UG/L)
1,2-DICHLOROPROPANE		ND (LOD=0.50 UG/L)
1,3-DICHLOROPROPANE		ND (LOD=0.50 UG/L)
2,2-DICHLOROPROPANE		ND (LOD=0.30 UG/L)
1,1-DICHLOROPROPENE		ND (LOD=0.50 UG/L)
CIS-1,3-DICHLOROPROPENE		ND (LOD=0.30 UG/L)
TRANS-1,3-DICHLOROPROPENE		ND (LOD=0.30 UG/L)
DIISOPROPYL ETHER		ND (LOD=10. UG/L)
ETHYLBENZENE		ND (LOD=0.30 UG/L)
HEXACHLOROBUTADIENE		ND (LOD=0.30 UG/L)
ISOPROPYLBENZENE		ND (LOD=0.50 UG/L)
P-ISOPROPYLTOLUENE		ND (LOD=0.50 UG/L)
METHYL ETHYL KETONE (MEK)		ND (LOD=10. UG/L)
METHYL ISOBUTYL KETONE (MIBK)		ND (LOD=10. UG/L)
METHYL-TERT-BUTYL ETHER (MTBE)		ND (LOD=1.0 UG/L)
METHYLENE CHLORIDE		ND (LOD=0.50 UG/L)
NAPHTHALENE		ND (LOD=0.30 UG/L)
N-PROPYLBENZENE		ND (LOD=0.50 UG/L)
STYRENE		ND (LOD=0.50 UG/L)
1,1,1,2-TETRACHLOROETHANE		ND (LOD=0.30 UG/L)
1,1,2,2-TETRACHLOROETHANE		ND (LOD=0.30 UG/L)
TETRACHLOROETHYLENE		ND (LOD=0.50 UG/L)
TETRAHYDROFURAN (THF)		ND (LOD=10. UG/L)
TOLUENE		ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROBENZENE		ND (LOD=0.30 UG/L)
1,2,4-TRICHLOROBENZENE		ND (LOD=0.50 UG/L)
1,1,1-TRICHLOROETHANE	+ 1.0	UG/L
detected between 0.50 (LOD) and 1.7 (LOQ) UG/L		
1,1,2-TRICHLOROETHANE		ND (LOD=0.50 UG/L)
TRICHLOROETHYLENE	+ 4.4	UG/L
TRICHLOROFLUOROMETHANE		ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROPROPANE		ND (LOD=0.50 UG/L)
1,1,2-TRICHLOROTRIFLUOROETHANE		ND (LOD=0.50 UG/L)
1,2,4-TRIMETHYLBENZENE		ND (LOD=0.50 UG/L)
1,3,5-TRIMETHYLBENZENE		ND (LOD=0.50 UG/L)
VINYL CHLORIDE	+ 0.72	UG/L
detected between 0.50 (LOD) and 1.7 (LOQ) UG/L		
M/P-XYLENE		ND (LOD=1.0 UG/L)
O-XYLENE		ND (LOD=0.30 UG/L)
VOCS IN WATER BY PURGE & TRAP-PREP-EPA METHOD 8021		C

--- Footnotes ---

7/14/97

HOSPEL - FINISHED

(AIR STRIP + CARBON)

State Laboratory of Hygiene  
University of Wisconsin Center for Health Sciences  
465 Henry Mall, Madison, WI 53706

R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

Environmental Science Section  
Organic chemistry

(608) 262-2797

DNR LAB ID 113133790

Id: Point/Well/...: IZ489 Field #: H05 Route:

Collection Date: 07/14/97 Time: 11:00 County: 46 (Ozaukee)

From: ALOYS HOSPEL WELL, 1725 MANCHESTER DR., GRAFTON, WI

Description: FINISHED WATER - AFTER CARBON

To: CHUCK WARZECHA

1414 E. WASHINGTON RM 96

Source: Private

MADISON, WI 53703

Account number: DH036

Collected by: CHUCK WARZECHA

Date Received: 07/15/97

Labslip #: OI000138

Reported: 07/24/97

---- test: TEMPERATURE - ICED - 0950

TEMPERATURE - ICED

ICED

---- test: VOCS IN WATER BY PURGE AND TRAP - EPA METHOD 8021

ACETONE	ND (LOD=10. UG/L)
BENZENE	ND (LOD=0.30 UG/L)
BROMOBENZENE	ND (LOD=0.30 UG/L)
BROMOCHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMODICHLOROMETHANE	ND (LOD=0.50 UG/L)
BROMOFORM	ND (LOD=0.50 UG/L)
BROMOMETHANE	ND (LOD=0.50 UG/L)
N-BUTYLBENZENE	ND (LOD=0.50 UG/L)
SEC-BUTYLBENZENE	ND (LOD=0.50 UG/L)
TERT-BUTYLBENZENE	ND (LOD=0.50 UG/L)
CARBON DISULFIDE	ND (LOD=10. UG/L)
CARBON TETRACHLORIDE	ND (LOD=0.50 UG/L)
CHLOROBENZENE	ND (LOD=0.30 UG/L)
CHLORODIBROMOMETHANE	ND (LOD=0.50 UG/L)
CHLOROETHANE	ND (LOD=0.50 UG/L)
CHLOROFORM	ND (LOD=0.50 UG/L)
CHLOROMETHANE	ND (LOD=0.50 UG/L)
2-CHLOROTOLUENE	ND (LOD=0.50 UG/L)
4-CHLOROTOLUENE	ND (LOD=0.30 UG/L)
1,2-DIBROMO-3-CHLOROPROPANE	ND (LOD=0.50 UG/L)
1,2-DIBROMOETHANE (EDB)	ND (LOD=0.50 UG/L)
DIBROMOMETHANE	ND (LOD=0.30 UG/L)
1,2-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,3-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,4-DICHLOROBENZENE	ND (LOD=0.30 UG/L)
DICHLORODIFLUOROMETHANE	ND (LOD=0.30 UG/L)
1,1-DICHLOROETHANE	ND (LOD=0.50 UG/L)
1,2-DICHLOROETHANE	ND (LOD=0.50 UG/L)
1,1-DICHLOROETHYLENE	ND (LOD=0.50 UG/L)
CIS-1,2-DICHLOROETHYLENE	ND (LOD=0.30 UG/L)

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R.H. Laessig, Ph.D., Director

S.L. Inhorn, M.D., Medical Director

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Environmental Science Section (608) 262-2797 DNR LAB ID 113133790  
... continuing Labslip # OI000138, Field # H05

TRANS-1,2-DICHLOROETHYLENE	ND (LOD=0.30 UG/L)
1,2-DICHLOROPROPANE	ND (LOD=0.50 UG/L)
1,3-DICHLOROPROPANE	ND (LOD=0.50 UG/L)
2,2-DICHLOROPROPANE	ND (LOD=0.30 UG/L)
1,1-DICHLOROPROPENE	ND (LOD=0.50 UG/L)
CIS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L)
TRANS-1,3-DICHLOROPROPENE	ND (LOD=0.30 UG/L)
DIISOPROPYL ETHER	ND (LOD=10. UG/L)
ETHYLBENZENE	ND (LOD=0.30 UG/L)
HEXACHLOROBUTADIENE	ND (LOD=0.30 UG/L)
ISOPROPYLBENZENE	ND (LOD=0.50 UG/L)
P-ISOPROPYLTOLUENE	ND (LOD=0.50 UG/L)
METHYL ETHYL KETONE (MEK)	ND (LOD=10. UG/L)
METHYL ISOBUTYL KETONE (MIBK)	ND (LOD=10. UG/L)
METHYL-TERT-BUTYL ETHER (MTBE)	ND (LOD=1.0 UG/L)
METHYLENE CHLORIDE	ND (LOD=0.50 UG/L)
NAPHTHALENE	ND (LOD=0.30 UG/L)
N-PROPYLBENZENE	ND (LOD=0.50 UG/L)
STYRENE	ND (LOD=0.50 UG/L)
1,1,1,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L)
1,1,2,2-TETRACHLOROETHANE	ND (LOD=0.30 UG/L)
TETRACHLOROETHYLENE	ND (LOD=0.50 UG/L)
TETRAHYDROFURAN (THF)	ND (LOD=10. UG/L)
TOLUENE	ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROBENZENE	ND (LOD=0.30 UG/L)
1,2,4-TRICHLOROBENZENE	ND (LOD=0.50 UG/L)
1,1,1-TRICHLOROETHANE	ND (LOD=0.50 UG/L)
1,1,2-TRICHLOROETHANE	ND (LOD=0.50 UG/L)
TRICHLOROETHYLENE	ND (LOD=0.30 UG/L)
TRICHLOROFLUOROMETHANE	ND (LOD=0.50 UG/L)
1,2,3-TRICHLOROPROPANE	ND (LOD=0.50 UG/L)
1,1,2-TRICHLOROTRIFLUOROETHANE	ND (LOD=0.50 UG/L)
1,2,4-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L)
1,3,5-TRIMETHYLBENZENE	ND (LOD=0.50 UG/L)
VINYL CHLORIDE	ND (LOD=0.50 UG/L)
M/P-XYLENE	ND (LOD=1.0 UG/L)
O-XYLENE	ND (LOD=0.30 UG/L)
VOCS IN WATER BY PURGE & TRAP-PREP-EPA METHOD 8021	C