## 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 25, 1997

File: Ozaukee/Grafton/Pvt#IZ487

Mark Zager and Susan Buettner 1741 Manchester Drive Grafton, WI 53012

WATER SAMPLE RESULTS / WELL INSPECTION

Re: Testing of Treatment Unit Effectiveness on Well Serving 1741 Manchester Drive

Dear Mr. Zager and Mrs. Buettner:

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 14. A total of 67 chemicals were tested as shown on the enclosed lab reports. Two samples were collected: One of the "raw water" from the well, and another of the "finished water" after the air stripping treatment unit.

Chemical	Raw Water	Finished Water	Max Allowed
Vinyl Chloride	2.5	ND	0.18
Benzene	ND	1.2	5.0
1,1-Dichloroethane	2.2	ND	850.0
cis-1,2,Dichloroethylene	12.0	0.57	70.0
1,1,1-Trichloroethane	1.6	ND	200.0
Methylene Chloride	ND	0.92	150.0
Toluene	ND	1.4	343.0
Trichloroethylene	14.0	0.62	5.0
1,2,4-Trimethylbenzene	ND	1.2	not established

The treatment unit is removing vinyl chloride completely, and eliminating or reducing all other VOCs which were present in the raw water to safe levels. However, and very puzzling, the air stripper seems to be introducing several other chemicals (*in italics*) into the finished water which were not present in the raw water. These chemicals are generally associated with gasoline or other petroleum. Fortunately the levels are all within safe drinking water standards. There are several possible explanations: 1) The basement air being used to mix with the water contains these chemical vapors or (2) Laboratory error (3) The air stripper components contain petroleum residues. Sharon Schaver of this department and Chuck Warzecha of the Division of Health revisited your home last week and resampled to evaluate these possible causes. Results will be forwarded as soon as available.



Regarding code-compliance, your well and pump system appeared in reasonable compliance with Wisconsin Administrative Code s.NR812.42.

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 Sharon Schaver Schaefer Bros. Pump Co. North American Aqua EPA Village of Grafton Town of Grafton file