



Minnesota Pollution Control Agency

DATE: May 19, 2005

TO: Current North Oaks Residents

RE: Update on Residential Sampling and Schedule for Solutions –
Area West of Lake Gilfillan

May 12th Council Meeting

On May 12th, the Minnesota Pollution Control Agency (MPCA), Minnesota Department of Health (MDH) and Conestoga-Rovers & Associates (CRA -environmental consultant for Alcoa and Whirlpool) briefed the North Oaks City Council about the ongoing sampling of residential wells located west of Lake Gilfillan. Of particular interest to residents was the attached map, which shows the vinyl chloride results for all samples collected through April 2005. The term "N.D." means that vinyl chloride was not detected at the lowest level possible for that sampling round.

Understanding Lab Reports

We recently mailed out the results of the last round of sampling, and we are getting feedback from residents that the lab reports are difficult to understand. Hence, we have created the attached information sheet to help people interpret their lab reports.

May Sampling Round

The MPCA and CRA will be starting the May sampling round early next week. The list of residential wells to be sampled is attached.

Near-Term Solutions

At this time, Alcoa and Whirlpool are providing bottled water to the three residences that have wells with vinyl chloride detected at some level. One home has received a drinking-water well advisory from the MDH. The MPCA, Alcoa, and Whirlpool will soon be in contact with that resident concerning other more long-term solutions.

Long-Term Solutions

The MPCA is expecting a report from Whirlpool and Alcoa in June 2005 which will discuss the results of the six-month sampling study and propose long-term solutions for homes with vinyl chloride detected in their wells.

Future Monitoring

The June 2005 report will also identify those homes subject to follow-up sampling, and it will indicate how often wells will be sampled.

Communications and City of North Oaks Web site

The city of North Oaks has offered to place information and updates on its Web site. Please check the Web site from time to time to get updates. The North Oaks Web site may be found at www.cityofnorth-oaks.com/.

We again thank you for your assistance and feedback. Please feel free to contact us.

Contacts:

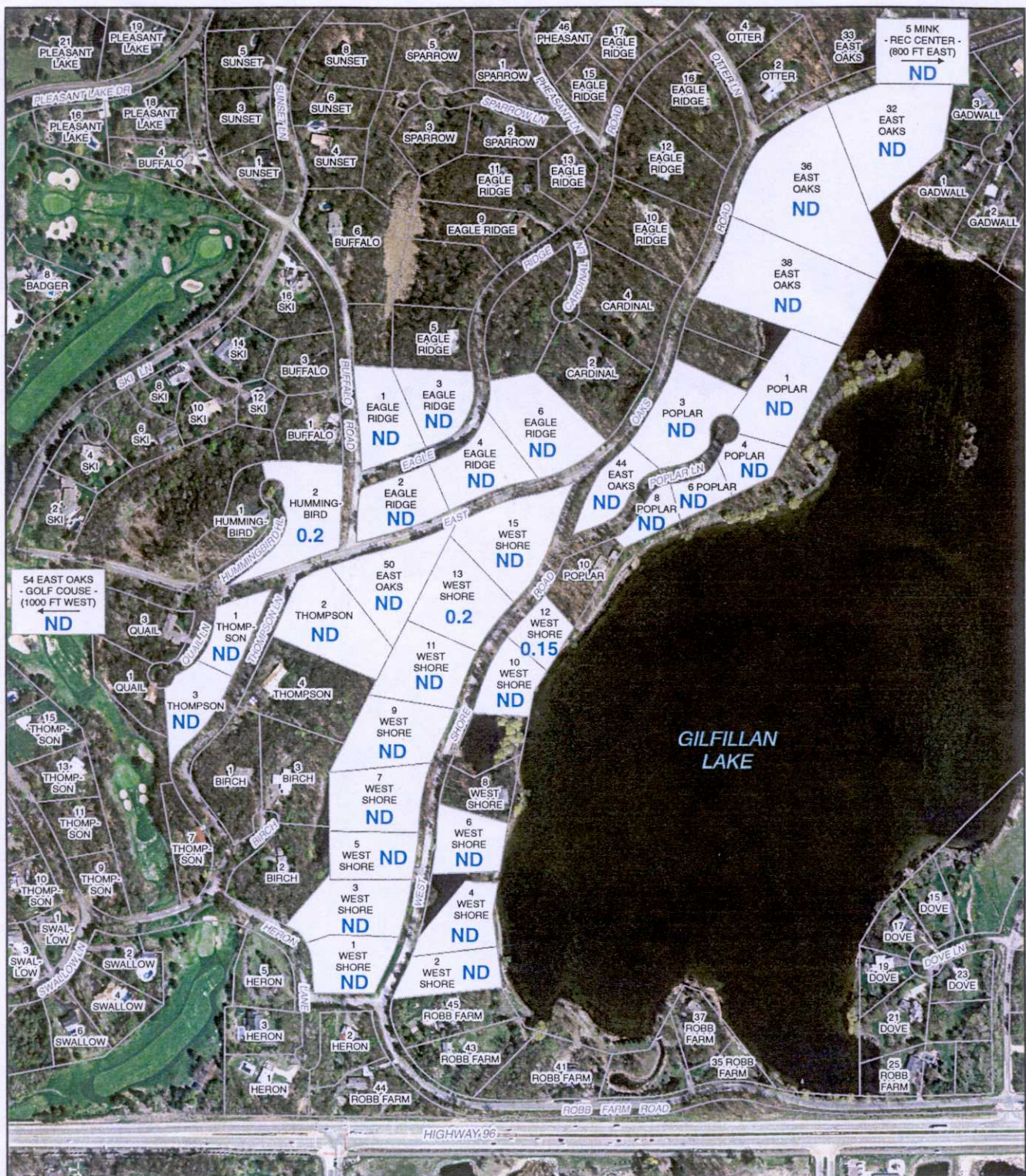
MPCA: Fred Campbell 651-296-7267 or fred.campbell@pca.state.mn.us

MDH: James Kelly 651-215-0913 or james.kelly@health.state.mn.us

CRA: Ron Frehner 651-639-0913 or rfrehner@croworld.com

FC:ls

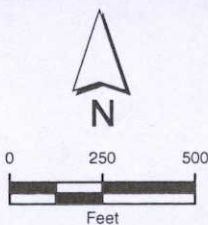
Attachments



LEGEND

- ND** VINYL CHLORIDE NOT DETECTED
(DETECTION LIMIT = 0.1 µg/L)
- 0.15** VINYL CHLORIDE CONCENTRATION (µg/L)

NOTE: SAMPLES COLLECTED DURING THE PERIOD FROM JANUARY - APRIL 2005. THE MAXIMUM CONCENTRATIONS OBSERVED DURING THIS PERIOD ARE SHOWN.



VINYL CHLORIDE
CONCENTRATIONS - 2005
North Oaks, MN

UNDERSTANDING YOUR LAB REPORT

Attached is a copy of a typical laboratory report. Key areas of the report are identified and explained below:

- Column 1: Lists the various compounds for which the well water was tested.
- Column 2: Lists the analytical results.
- Column 3: Lists the reporting level, which is the lowest concentration of a particular compound that the laboratory can quantify.
- Column 4: Lists the units. In this report, the units are micrograms per liter (or ug/L). One ug/l is equal to one part per billion.

The lab report also includes surrogate compounds (e.g. toluene-d8) in bold lettering (Column 1) that are quality control measurements for compounds added to the sample by the lab. These compounds are not in your sample.

If a particular compound is detected (except surrogates), the result is indicated in bold lettering. Whenever a compound is not detected (which is most of the time), the result is reported as "less than" the reporting level (for example: <0.2 ug/L).

The reporting level should be distinguished from the "detection level." The detection level is lower than the reporting level and is the lowest concentration of a compound that the laboratory can detect. Occasionally, the laboratory will detect a compound below the reporting level. Since the detection is below the reporting level, the lab is not able to determine *how much* of that compound is present, only that it *is* present at concentrations below the reporting level. In this case, the report will state: "Peak present below the reporting level."

Of most interest to residents might be the vinyl chloride results. This result appears on the last page of your report. The MDH lab uses a special method to achieve a low detection limit for vinyl chloride. A result of "< 0.2 ug/L" for vinyl chloride without a note of "peak present" means that vinyl chloride was not detected at a level of one -half the reporting limit (i.e., it is not detected at a level of 0.1 ug/L). The Health Risk Limit for vinyl chloride is 0.2 ug/L.

If you have questions about your lab report, please contact James Kelly at the Minnesota Department of Health at 651-215-0913.

Minnesota Department Of Health - Environmental Laboratory

Amended Report - Client Copy - Report Of Analytical Results

Program: PL
Program Name: MPCA-32 METRO MERLA-SF

Date Received: 31-MAR-2005
Date Generated: 29-APR-2005
Request Page: 25 of 32

Samples: 200505583 - 200505588

Date Reported: 29-APR-2005
Original Date Reported: 19-APR-2005

Site ID	Project Name	Sampled By
-	HWY 96 DUMP	ILLI

Sample No: 200505587 Receiving Comments: palen

Coll Date	Coll Time	Field No	Sampling Point
29-MAR-2005	1410	5	SAMPLE LOCATION
Trip Blank	Field Blank		
200505588	-		

***** SAMPLE RESULTS *****

Unit: ORGANIC CHEMISTRY

Reviewed By PDS on 19-APR-05

Note: Positive Organic Results are indicated by BOLD.

	Result	Rept Level	Units	Analysis Date
<u>COLUMN #1</u>	<u>Column#2</u>	<u>Column#3</u>	<u>Column#4</u>	
168 VOCs in Water by GC/MS				08-APR-05
4-Bromofluorobenzene (surrogate)	94.0	70-130	%	} Quality Control Data.
1,2-Dichloroethane-D4 (surrogate)	103	70-130	%	
Dibromofluoromethane (surrogate)	113	70-130	%	
Toluene-d8 (surrogate)	95.8	70-130	%	
Acetone	< 20	20	ug/L	
Allyl chloride	< 0.5	0.5	ug/L	
Benzene	< 0.2	0.2	ug/L	
Bromobenzene	< 0.2	0.2	ug/L	
Bromochloromethane	< 0.5	0.5	ug/L	
Bromodichloromethane	< 0.2	0.2	ug/L	
Bromoform	< 0.5	0.5	ug/L	
Bromomethane	< 1.0	1.0	ug/L	

The spike recoveries for this target analyte did not meet the QC acceptance criteria in the LCS/LCSD. Since the recoveries showed a positive bias and the target analyte was not detected in the sample, the datum was accepted without qualification.

n-Butylbenzene	< 0.5	0.5	ug/L
sec-Butylbenzene	< 0.5	0.5	ug/L
tert-Butylbenzene	< 0.5	0.5	ug/L
Carbon tetrachloride	< 0.2	0.2	ug/L
Chlorobenzene	< 0.2	0.2	ug/L
Chlorodibromomethane	< 0.5	0.5	ug/L
Chloroethane	< 0.5	0.5	ug/L
Chloroform	< 0.1	0.1	ug/L
Chloromethane	< 1.0	1.0	ug/L

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***** SAMPLE RESULTS *****

Unit: ORGANIC CHEMISTRY

Reviewed By PDS on 19-APR-05

Result Rept Level Units

Note: Positive Organic Results are indicated by BOLD.

468 VOCs in Water by GC/MS (Cont.)

08-APR-05

2-Chlorotoluene	< 0.5	0.5	ug/L
4-Chlorotoluene	< 0.5	0.5	ug/L
1,2-Dibromo-3-chloropropane (DBCP)	< 2.0	2.0	ug/L
1,2-Dibromoethane (EDB)	< 0.5	0.5	ug/L
Dibromomethane	< 0.5	0.5	ug/L
1,2-Dichlorobenzene	< 0.2	0.2	ug/L
1,3-Dichlorobenzene	< 0.2	0.2	ug/L
1,4-Dichlorobenzene	< 0.2	0.2	ug/L
Dichlorodifluoromethane	< 1.0	1.0	ug/L
1,1-Dichloroethane	< 0.2	0.2	ug/L
1,2-Dichloroethane	< 0.2	0.2	ug/L
1,1-Dichloroethene	< 0.5	0.5	ug/L
cis-1,2-Dichloroethene	< 0.2	0.2	ug/L
trans-1,2-Dichloroethene	< 0.1	0.1	ug/L
Dichlorofluoromethane	< 0.5	0.5	ug/L
1,2-Dichloropropane	< 0.2	0.2	ug/L
1,3-Dichloropropane	< 0.2	0.2	ug/L
2,2-Dichloropropane	< 0.5	0.5	ug/L

The Relative Percent Difference between duplicates for this target analyte did not meet the QC acceptance criteria. The sample result should be considered as estimated.

1,1-Dichloropropene	< 0.2	0.2	ug/L
cis-1,3-Dichloropropene	< 0.2	0.2	ug/L
trans-1,3-Dichloropropene	< 0.2	0.2	ug/L

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200505588			

***** SAMPLE RESULTS *****

Unit: ORGANIC CHEMISTRY

Reviewed By PDS on 19-APR-05

Result Rept Level Units

Note: Positive Organic Results are indicated by BOLD.

468 VOCs in Water by GC/MS (Cont.)

08-APR-05

Ethylbenzene	< 0.5	0.5	ug/L
Ethyl ether	< 2.0	2.0	ug/L
Hexachlorobutadiene	< 1.0	1.0	ug/L
Isopropylbenzene	< 0.5	0.5	ug/L
p-Isopropyltoluene	< 0.5	0.5	ug/L
Methylene chloride	< 0.5	0.5	ug/L
Methyl ethyl ketone (MEK)	< 10	10	ug/L
Methyl isobutyl ketone (MIBK)	< 5.0	5.0	ug/L
Methyl tertiary butyl ether (MTBE)	< 2.0	2.0	ug/L
Naphthalene	< 1.0	1.0	ug/L
n-Propylbenzene	< 0.5	0.5	ug/L
Styrene	< 0.5	0.5	ug/L
1,1,1,2-Tetrachloroethane	< 0.2	0.2	ug/L
1,1,2,2-Tetrachloroethane	< 0.2	0.2	ug/L
Tetrachloroethene	< 0.2	0.2	ug/L
Tetrahydrofuran (THF)	< 10	10	ug/L
Toluene	< 0.5	0.5	ug/L
1,2,3-Trichlorobenzene	< 1.0	1.0	ug/L

The spike recoveries for this target analyte did not meet the QC acceptance criteria in the LCS/LCSD. The sample results should be considered as estimated.

1,2,4-Trichlorobenzene	< 0.5	0.5	ug/L
1,1,1-Trichloroethane	< 0.2	0.2	ug/L
1,1,2-Trichloroethane	< 0.2	0.2	ug/L
Trichloroethene (TCE)	< 0.1	0.1	ug/L

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***** SAMPLE RESULTS *****

Unit: ORGANIC CHEMISTRY

Reviewed By PDS on 19-APR-05

Result Rept Level Units

Note: Positive Organic Results are indicated by BOLD.

468 VOCs in Water by GC/MS (Cont.)

08-APR-05

Trichlorofluoromethane	< 0.5	0.5	ug/L
1,2,3-Trichloropropane	< 0.5	0.5	ug/L
1,1,2-Trichlorotrifluoroethane	< 0.2	0.2	ug/L
1,2,4-Trimethylbenzene	< 0.5	0.5	ug/L
1,3,5-Trimethylbenzene	< 0.5	0.5	ug/L
Vinyl chloride	See 460		
o-Xylene	< 0.2	0.2	ug/L
p&m-Xylene	< 0.3	0.3	ug/L

The spike recoveries for this target analyte did not meet the QC acceptance criteria in the LCS/LCSD. The sample results should be considered as estimated.

460 Vinyl Chloride, Low Level

< 0.2 0.2 ug/L

08-APR-05

if result is < 0.2 ug/L
 and no note of "peak present"
 appears on your report, Vinyl
 chloride was not found
 at a detection limit of 0.1 ug/L

TABLE 1

**PROPOSED SAMPLING LOCATIONS
FOR MAY 2005 SAMPLING ROUND**

<i>Locations</i>	<i>Rationale</i>
1 Buffalo Road	North of 2 Hummingbird Hill
2 Eagle Ridge	Second sample near 2 Hummingbird Hill to confirm ND
50 East Oaks	Confirmation of N.D. located between two detections
1 Hummingbird Hill	West of 2 Hummingbird Hill
2 Hummingbird Hill	Follow-up for vinyl chloride detection
1 Poplar Lane	MPCA told homeowner a sample would be collected.
10 Poplar	North of 12 West Shore Road; Homeowner not home for March 2005 sampling round.
2 Ski Lane	West of 2 Hummingbird Hill
4 Ski Lane	West of 2 Hummingbird Hill
6 Ski Lane	West of 2 Hummingbird Hill
8 Ski Lane	West of 2 Hummingbird Hill
10 Ski Lane	West of 2 Hummingbird Hill
12 Ski Lane	West of 2 Hummingbird Hill
1 Thompson Lane	Second sample near 2 Hummingbird Hill to confirm ND
2 Thompson Lane	Second sample near 2 Hummingbird Hill to confirm ND
12 West Shore	Agreed upon monthly location
13 West Shore	Agreed upon monthly location
10 West Shore	South of 12 West Shore Road
11 West Shore	South of 13 West Shore Road
15 West Shore	North of 13 West Shore Road