



**Environmental Health Laboratories**  
The Nation's Drinking Water Laboratory

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**LABORATORY REPORT**

Client: Lake Papakeechee Home Owners Association  
Attn:

Report#: 504268-70

Priority: Standard Written

Status: Final

Project/Site: Inlet

Samples Submitted: Three surface water samples

Copies to: None

Collected: 06/15/00

By:

Received: 06/15/00

**REPORT SUMMARY**

**General Chemistry:** Oil and grease was not detected in the sample submitted for analysis.

**Microbiology:** Fecal coliform was detected in the sample submitted for analysis at a concentration of 30 cfu/100mL.

**Semi-Volatile Organic Chemicals:** The following semi-volatile organic chemicals were detected in the sample submitted for analysis at the concentrations indicated below:

Parameter	Results (ug/L)
Atrazine	0.1      The MCL for this parameter is 3.0
Fluridone	4.4      There is no MCL for this parameter

This test covers chemical contamination arising from the use of many pesticides, PCB's, plasticizing agents, wood preserving agents, as well as many other chemicals used in commercial and industrial products that are suspected cancer causing agents.

Detailed quantitative results are presented on the following pages.

We appreciate the opportunity to provide you with this analysis. If you have any questions concerning this report, please do not hesitate to call us at (219) 233-4777.

*Note: This report may not be reproduced, except in full, without written approval from Environmental Health Laboratories (div. of MAS Technology Corporation).*

REVIEWED BY: Michelle Lee

DATE: 7-13-00

FINALIZED BY: MA

DATE: 7/13/2000

Client: Lake Papakeeche Home Owners Association

Report#: 504268-70

**GENERAL CHEMISTRY —Surface Water**

Lab #	Parameter	MCL	Results
504268	Oil & Grease, Total	5.0	< 5.0 mg/L

Analyzed: 06/23/00

Analyst: BJJ (Sherry)

Method: SM 5520F

Note: Oil & grease analyses were performed by Sherry Laboratories of Fort Wayne, IN.

**MICROBIOLOGY—Surface Water**

Lab #	Parameter	MCL	Results
504270	Fecal Coliform	<del>MCL</del> <i>Limit 200</i>	30 cfu/100mL

Analyzed: 06/15/00

Analyst: AB

Method: SM 9222D

Client: Lake Papakeeche Home Owners Association

Report#: 504268-70

**SEMI-VOLATILE ORGANIC CHEMICALS—Surface Water**

Site Description: Inlet

Lab #: 504269

Parameter	Tradename	MCL (ug/L)	Result (ug/L)
<b>Phthalates</b>			
Butyl benzyl phthalate		NA	ND Ł
Di-n-butyl phthalate		NA	ND Ł
Diethylphthalate		NA	ND Ł
Di(2-ethylhexyl)adipate		400	< 0.6
Di(2-ethylhexyl)phthalate		6	< 0.6
Dimethylphthalate		NA	ND Ł
Di-n-octyl phthalate		NA	ND Ł
<b>PCBs</b>			
Chlorobiphenyl		NA	ND Ł
Dichlorobiphenyl		NA	ND Ł
Trichlorobiphenyl		NA	ND Ł
Tetrachlorobiphenyl		NA	ND Ł
Pentachlorobiphenyl		NA	ND Ł
Hexachlorobiphenyl		NA	ND Ł
Heptachlorobiphenyl		NA	ND Ł
Octachlorobiphenyl		NA	ND Ł
<b>Polynuclear Aromatic Hydrocarbons</b>			
Acenaphthylene		NA	ND Ł
Anthracene		NA	ND Ł
Benzo (a) anthracene		NA	ND Ł
Benzo (b) fluoranthene		NA	ND Ł
Benzo (k) fluoranthene		NA	ND Ł
Benzo (g,h,i) perylene		NA	ND Ł
Benzo (a) pyrene		0.2	< 0.02
Chrysene		NA	ND Ł
Dibenzo (a,h) anthracene		NA	ND Ł
Fluoranthene		NA	ND Ł
Fluorene		NA	ND Ł
Indeno (1,2,3-cd) pyrene		NA	ND Ł
Phenanthrene		NA	ND Ł
Pyrene		NA	ND Ł
<b>Pesticides/Herbicides</b>			
Acetochlor		NA	ND Ł
Alachlor	Lasso <sup>®</sup>	2	< 0.1
Aldrin	Aldrite <sup>®</sup>	NA	< 0.1
Ametryn	Gesapax <sup>®</sup>	NA	ND Ł
Anilazine		NA	ND Ł
Aspon	Aspon <sup>®</sup>	NA	ND Ł
Atraton	Gesatamin <sup>®</sup>	NA	ND Ł
Atrazine	AAtrex <sup>®</sup>	3	0.1
Azinphos-ethyl		NA	ND Ł

Continued on the following page

## SEMI-VOLATILE ORGANIC CHEMICALS-Continued

Parameter	Tradename	MCL (ug/L)	Result (ug/L)
Azinphos-methyl	Carfene <sup>®</sup>	NA	ND Ł
Bendiocarb		NA	ND Ł
Benfluralin	Balan <sup>®</sup>	NA	ND Ł
Bolstar	Bolstar <sup>®</sup>	NA	ND Ł
Bromacil	Hyvar <sup>®</sup>	NA	< 0.1
Butachlor	Machete <sup>®</sup>	NA	< 0.1
Butylate	Sutan <sup>®</sup> +	NA	ND Ł
Carbophenothion		NA	ND Ł
Carboxin	Vitavax <sup>®</sup>	NA	ND Ł
Chlordane Components			
alpha-Chlordane	Chlordrite <sup>®</sup>	2 *	< 0.1
gamma-Chlordane	Chlordrite <sup>®</sup>	2 *	< 0.1
Chlorfevinfos		NA	ND Ł
Chlorobenzilate	Kop-Mite <sup>®</sup>	NA	ND Ł
Chloroneb	Terraneb <sup>®</sup>	NA	ND Ł
Chlorpropham	Chloro IPC <sup>®</sup>	NA	ND Ł
Chloropropylate	Acaralate <sup>®</sup>	NA	ND Ł
Chlorpyrifos	Dursban <sup>®</sup>	NA	ND Ł
Chlorpyrifos methyl		NA	ND Ł
Chlorothalonil	Bravo <sup>®</sup>	NA	ND Ł
Clomazone	Command <sup>®</sup>	NA	ND Ł
Clopyralid		NA	ND Ł
Coumaphos		NA	ND Ł
Crotoxyphos	Ciodrin <sup>®</sup>	NA	ND Ł
Cyanazine	Bladex <sup>®</sup>	NA	< 0.1
Cycloate	Sabet <sup>®</sup>	NA	ND Ł
DCPA	Dacthal <sup>®</sup>	NA	ND Ł
4,4'-DDD	Rothane <sup>®</sup>	NA	ND Ł
4,4'-DDE		NA	ND Ł
4,4'-DDT	Zerdane <sup>®</sup>	NA	ND Ł
Demeton	Systox <sup>®</sup>	NA	ND Ł
Desethylatrazine		NA	ND Ł
Desisopropylatrazine		NA	ND Ł
Diazinon	Spectracide <sup>®</sup>	NA	ND Ł
Dichlobenil	Casoron <sup>®</sup>	NA	ND Ł
Dichlofenthion	VC-13 Nemacide <sup>®</sup>	NA	ND Ł
Dichloran	Botran <sup>®</sup>	NA	ND Ł
Dichlorvos	Cekusan <sup>®</sup>	NA	ND Ł
Dicrotophos		NA	ND Ł
Dieldrin	Panoram D-31 <sup>®</sup>	NA	< 0.1

Continued on the following page

**SEMI-VOLATILE ORGANIC CHEMICALS-Continued**

Parameter	Tradename	MCL (ug/L)	Result (ug/L)
Dimethoate		NA	ND Ł
2,4-Dinitrotoluene		NA	ND Ł
2,6-Dinitrotoluene		NA	ND Ł
Dioxathion		NA	ND Ł
Diphenamid	Dymid <sup>®</sup>	NA	ND Ł
Disulfoton	Disyston <sup>®</sup>	NA	ND Ł
Disulfoton sulfone		NA	ND Ł
Dyfonate	Dyfonate <sup>®</sup>	NA	ND Ł
Endosulfan I		NA	ND Ł
Endosulfan II		NA	ND Ł
Endosulfan sulfate		NA	ND Ł
Endrin	Hexadrin <sup>®</sup>	2	< 0.01
Endrin aldehyde		NA	ND Ł
EPN		NA	ND Ł
EPTC	Eptam <sup>®</sup>	NA	ND Ł
Esfenvalerate		NA	ND Ł
Ethalfuralin	Sonalan <sup>®</sup>	NA	ND Ł
Ethion	Rhodocide <sup>®</sup>	NA	ND Ł
Ethoprop	Mocap <sup>®</sup>	NA	ND Ł
Etridiazole	Terrazole <sup>®</sup>	NA	ND Ł
Famphur		NA	ND Ł
Fenamiphos	Nemacur <sup>®</sup>	NA	ND Ł
Fenitrothion		NA	ND Ł
Fenoxaprop ethyl		NA	ND Ł
Fensulfothion	Dasanit <sup>®</sup>	NA	ND Ł
Fenthion	Baytex <sup>®</sup>	NA	ND Ł
Fluazifop-butyl	Fusilade <sup>®</sup>	NA	ND Ł
Fluchloralin	Basalin <sup>®</sup>	NA	ND Ł
Fluometuron	Meturon <sup>®</sup>	NA	ND Ł
Fluridone	Sonar <sup>®</sup>	NA	4.4 Ł
Heptachlor	Heptamul <sup>®</sup>	0.4	< 0.04
Heptachlor epoxide		0.2	< 0.02
Hexachlorobenzene	No Bunt <sup>®</sup>	0.2	< 0.1
Hexachlorocyclopentadiene		50	< 0.1
Hexazinone	Velpar <sup>®</sup>	NA	ND Ł
Iprodione		NA	ND Ł
Isofenphos		NA	ND Ł
Isophorone		NA	ND Ł
Leptophos		NA	ND Ł

Continued on the following page

## SEMI-VOLATILE ORGANIC CHEMICALS-Continued

Parameter	Tradename	MCL (ug/L)	Result (ug/L)
Lindane Components			
alpha-BHC		NA	ND Ł
beta-BHC		NA	ND Ł
delta-BHC		NA	ND Ł
gamma-BHC	Gammexane <sup>®</sup>	0.2	ND Ł
Malathion	Acimaj <sup>®</sup>	NA	ND Ł
Merphos	Folex <sup>®</sup> 6EC	NA	ND Ł
Metalaxyl		NA	ND Ł
Methoxychlor	Marlate <sup>®</sup>	40	< 0.1
1-Methyl Napthalene		NA	ND Ł
2-Methyl Napthalene		NA	ND Ł
Methyl Paraoxon		NA	ND Ł
Methyl Parathion	Bladan <sup>®</sup>	NA	ND Ł
Metolachlor	Dual <sup>®</sup>	NA	< 0.1
Metribuzin	Lexone <sup>®</sup>	NA	< 0.1
Metsulfuron methyl		NA	ND Ł
Mevinphos	Phosdrin <sup>®</sup>	NA	ND Ł
MGK-264	Octacide 264 <sup>®</sup>	NA	ND Ł
MGK-326		NA	ND Ł
Mirex		NA	ND Ł
Molinate	Ordram <sup>®</sup>	NA	ND Ł
Monocrotophos		NA	ND Ł
Naled		NA	ND Ł
Napthalene		NA	ND Ł
Napropamide	Devrinol <sup>®</sup>	NA	ND Ł
Nonachlor, trans		2 *	< 0.1
Norflurazon	Solicam <sup>®</sup>	NA	ND Ł
Oryzalin		NA	ND Ł
Oxadiazon	Chipco <sup>®</sup>	NA	ND Ł
Oxyfluorfen		NA	ND Ł
Parathion		NA	ND Ł
Pebulate	Tillam <sup>®</sup>	NA	ND Ł
Pendimethalin	Prowl <sup>®</sup>	NA	ND Ł
Pentachlorobenzene		NA	ND Ł
Pentachlorophenol	Pentacon <sup>®</sup>	1	< 1.0
Permethrin, cis-	Ambush <sup>®</sup>	NA	ND Ł
Permethrin, trans-	Ambush <sup>®</sup>	NA	ND Ł
Phorate	Rampart <sup>®</sup>	NA	ND Ł
Phosmet	Imidan <sup>®</sup>	NA	ND Ł
Phosphamidon		NA	ND Ł

Continued on the following page

**SEMI-VOLATILE ORGANIC CHEMICALS-Continued**

Parameter	Tradename <sup>®</sup>	MCL (ug/L)	Result (ug/L)
Profluralin	Tolban <sup>®</sup>	NA	ND Ł
Prometon	Pramitol <sup>®</sup>	NA	< 1.0
Prometryn	Caparol <sup>®</sup>	NA	ND Ł
Pronamide	Kerb <sup>®</sup>	NA	ND Ł
Propachlor	Ramrod <sup>®</sup>	NA	< 0.1
Propanil	Prop-Job <sup>®</sup>	NA	ND Ł
Propazine	Milogard <sup>®</sup>	NA	ND Ł
Propiconazole	Tilt <sup>®</sup>	NA	ND Ł
Prothiofos	Tokuthion <sup>®</sup>	NA	ND Ł
Simazine	Princep <sup>®</sup>	4	< 0.07
Simetryn	Gy-bon <sup>®</sup>	NA	ND Ł
Stirofos	Gardona <sup>®</sup>	NA	ND Ł
Sulfotep		NA	ND Ł
TEPP		NA	ND Ł
Terbacil	Sinbar <sup>®</sup>	NA	ND Ł
Terbufos	Counter <sup>®</sup>	NA	ND Ł
Terbutryn	Prebane <sup>®</sup>	NA	ND Ł
1,2,4,5-Tetrachlorobenzene		NA	ND Ł
Thiabendazole		NA	ND Ł
Thiobencarb		NA	ND Ł
Thionazin		NA	ND Ł
Triadimefon	Bayleton <sup>®</sup>	NA	ND Ł
Tribufos (DEF)	DEF 6 <sup>®</sup>	NA	ND Ł
Trichlorfon	Metrifonate <sup>®</sup>	NA	ND Ł
Trichloronate		NA	ND Ł
Trifluralin	Treflan <sup>®</sup>	NA	< 0.1
Vernolate	Vernam <sup>®</sup>	NA	ND Ł
Vinclozolin	Vinclozolline <sup>®</sup>	NA	ND Ł

ND Ł = Not Detected - Semi-quantitative analysis only. If this parameter is present in the sample, the concentration is estimated by the ratio of the peak area to that of the internal standard. The compounds listed can be routinely detected down to levels of 0.1 - 1.0 ug/L.

\* The MCL presented is for total chlordane.

NA = Not Applicable

Surrogate Standards	Limits (%)	% Recovery	
		Undil	
2,4,5,6-Tetrachloro-m-xylene	70-130	76	
Pentachloronitrobenzene	70-130	92	
4,4'-Dichlorobiphenyl	70-130	90	
Triphenylphosphate	70-130	104	

Analyzed: 06/26/00

Analyst: AT

Method: 525.2

## REFERENCES AND DEFINITIONS OF TERMS

**General Chemistry**

References: 1. EPA-600/4-79-020 (rev. March 1983)  
Methods for Chemical Analysis of Water and Wastes.  
2. Standard Methods for the Examination of Water and Wastewater,  
Vol. 17, 1989.

**Total Coliform**

Analytical technique: MUG  
Reference: Standard Methods for the Examination of Water and Wastewater,  
Vol.17. 1989

**Semi-Volatile Organic Chemical (SOC) Drinking Water Analysis**

Analytical Technique: Capillary Gas Chromatography - Mass Spectrometry (GC/MS)  
Reference: EPA/600/4-88/039  
Methods for the Determination of Organic Compounds in Drinking  
Water, December 1988 (rev. July 1991).

**Semi-Volatile Organic Chemicals (SOCs)** are chemicals used in the manufacture of a wide range of products. These include chemicals used in the production of wood preservatives, hydraulic and electrical transformer oils, plastics, tars, creosotes, and other types of pesticide formulations. SOC's are usually categorized into the following groups: Phenols, Pesticides, PCBs, Phthalates, Polynuclear Aromatics, and other miscellaneous chemicals commonly referred to as Base Neutrals. The presence of these chemicals in water usually results from exposure of the water to waste materials or soils containing these materials or from an accidental spill.

**MCL (Maximum Contaminant Levels)** are the maximum allowable concentrations of "regulated" chemicals in public drinking water supplies. Note that monitoring requirements for public supplies are not currently applicable to private water systems.

**MRL** = EHL's Minimum Reporting Limit

**Results:** Values presented in the result column represent the lowest reportable value for a parameter after correcting for all sample dilutions.

"<" means "less than". The number given is the lowest reportable value by the procedure used for analysis.

**1 mg/L** = 1 milligram per liter (mg/L) = 1 part per million (ppm)

**1 ug/L** = 1 microgram per liter (ug/L) = 1 part per billion (ppb)

**1 cfu** = 1 Coliform Forming Unit = a bacteria colony presumed to have originated from a single bacterium present in the sample





# Environmental Health Laboratories

The Nation's Drinking Water Laboratory | 110 S. Hill Street • South Bend, IN 46617 • Phone (219) 233-4777 • (800) 332-4345

ORDER # 48796

www.ehl.cc

SHADED AREA FOR LAB USE ONLY

## CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

CLIENT/COMPANY ORDERING TEST <b>PARAKEETNI* Protective Assn.</b>	COLLECTION		STATE OF SAMPLE ORIGIN <b>IN</b>	SAMPLER (Signature) <b>Randy Girod</b>	PWS ID#	PO# <b>48796</b>	# OF CONTAINERS	MATRIX CODE	TURNAROUND TIME
	DATE	TIME							
504268	6/15/00	1030 AM	INLET	TD16				SW SW	
504269	6/15/00	1030 AM	INLET	PESTICIDES				SW SW	
504270	6/15/00	1030 AM	MOST POPULATED	FECAL COLIFORM				SW SW	

CARRIER \_\_\_\_\_ AIRBILL NO. \_\_\_\_\_ COOLER NO. \_\_\_\_\_ DATE SHIPPED \_\_\_\_\_

**LAB RESERVES THE RIGHT TO RETURN UNUSED PORTIONS OF NON-AQUEOUS SAMPLES TO CLIENT.**

RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED BY: (Signature)	DATE	TIME
<i>[Signature]</i>	6/15/00	1400 AM			
RELINQUISHED BY: (Signature)	DATE	TIME	RECEIVED FOR LABORATORY BY:	DATE	TIME
			<i>Er Pearl</i>	6/15/00	1400 AM
CONDITIONS UPON RECEIPT: (Check One) <input type="checkbox"/> Iced <input type="checkbox"/> Ambient     or     °C Upon Receipt					

**MATRIX CODES:**  
 DW = DRINKING WATER  
 GW = GROUNDWATER  
 SW = SURFACE WATER  
 PW = POOL WATER  
 RW = REAGENT WATER  
 WSW = WASTEWATER

**TURN-AROUND TIME (TAT) - SURCHARGES\***  
 IV = IMMEDIATE (3 WORKING DAYS) VERBAL 100% STAT = LESS THAN 48 HOURS Call  
 IW = IMMEDIATE (3 WORKING DAYS) WRITTEN 125%  
 SP = WEEKEND, HOLIDAY Call  
 Samples received unannounced with less than 48 hours holding time remaining may be subject to additional surcharges.

\* Expedited services not available for all tests - call for details.

**LAB COMMENTS** (219) 856-2469 phone