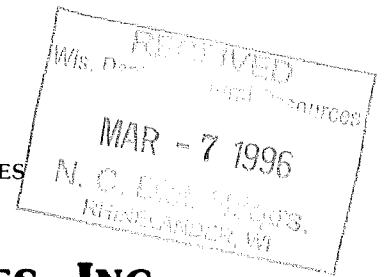




ECOLOGICAL CONSULTING AND
ENVIRONMENTAL LABORATORY SERVICES

WHITE WATER ASSOCIATES, INC.



March 5, 1996

Mr. Scott Watson
Wisconsin Department of Natural Resources
North Central District Headquarters
107 Sutcliff
Box 818
Rhineland, Wisconsin 54501

Re: C.M. Christiansen Co., Phelps, Wisconsin - Pole Treatment Project

Dear Mr. Watson:

Please find included the second round of groundwater monitoring data. The field blank and field duplicate for pentachlorophenol were not analyzed due to an unrecoverable laboratory accident.

If you have any questions, do not hesitate to call me at (906) 822-7373.

Sincerely,

Robert D. Edstrom, Ph.D.

cc: R. Roder - Reinhart, Boerner, Van Deuren,
Norris & Rieselbach, S.C.
M. Gregory - Coleman Engineering

C.M. CHRISTIANSEN Co.
Phelps, Wisconsin

GROUNDWATER SAMPLE ANALYTICAL RESULTS: December 15, 1995

Pentachlorophenol (ug/L, ppb)

Groundwater Wells	Concentration
MW-1	0.73
MW-2	ND
MW-3	0.67
MW-4	0.08
MW-5	0.56
MW-6	32
MW-7	5,200
MW-8	1.2
Field Blank	LAB ACCIDENT
MW-7 Duplicate	LAB ACCIDENT
Lab Blank 52B	ND
Lab Blank 53B	ND
Spike Recovery	77%
Spike Recovery	84%
Relative Percent Difference	9%
MDL (ug/L)	0.05

ND = Not Detected.

C.M. CHRISTIANSEN Co.
Phelps, Wisconsin

GROUNDWATER SAMPLE ANALYSIS: December 15, 1995

Polynuclear Aromatic Hydrocarbons (ug/L, ppb)

Groundwater Wells	Naphthalene	Acenaphthalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene
MW-1	9	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND	ND
MW-5	ND	ND	ND	ND	ND	ND	ND
MW-6	ND	ND	ND	ND	ND	ND	ND
MW-7	ND	ND	16	28	45	ND	ND
MW-8	ND	ND	ND	ND	ND	ND	ND
Field Blank	ND	ND	ND	ND	ND	ND	ND
MW-7 Duplicate	ND	ND	ND	29	52	ND	ND

ND = Not Detected.

EQL = Estimated Quantitation Limit.

MW-7 and Field Duplicate analyzed at dilutions due to the presence of an unrequested analyte at high concentrations.

C.M. CHRISTIANSEN Co.
Phelps, Wisconsin

GROUNDWATER SAMPLE ANALYSIS

Polynuclear Aromatic Hydrocarbons (ug/L, ppb)

Groundwater Wells	Pyrene	Benzo(a)- anthracene	Chrysene	Benzo(b)- fluoranthene	Benzo(k)- fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)- pyrene	Dibenz(a,h)- anthracene
MW-1	ND	ND	ND	ND	ND	ND	ND	ND
MW-2	ND	ND	ND	ND	ND	ND	ND	ND
MW-3	ND	ND	ND	ND	ND	ND	ND	ND
MW-4	ND	ND	ND	ND	ND	ND	ND	ND
MW-5	ND	ND	ND	ND	ND	ND	ND	ND
MW-6	ND	ND	ND	ND	ND	ND	ND	ND
MW-7	ND	ND	ND	ND	ND	ND	ND	ND
MW-8	ND	ND	ND	ND	ND	ND	ND	ND
Field Blank	ND	ND	ND	ND	ND	ND	ND	ND
MW-7 Duplicate	ND	ND	ND	ND	ND	ND	ND	ND

ND = Not Detected.

EQL = Estimated Quantitation Limit.

MW-7 and Field Duplicate analyzed at dilutions due to the presence of an unrequested analyte at high concentrations.

C.M. CHRISTIANSEN Co.
Phelps, Wisconsin

GROUNDWATER SAMPLE ANALYSIS

Polynuclear Aromatic Hydrocarbons (ug/L, ppb)

Groundwater Wells	Benzo(g,h,i)-		Total PAH
	perylene	EQL	
MW-1	ND	11	9
MW-2	ND	11	ND
MW-3	ND	11	ND
MW-4	ND	10	ND
MW-5	ND	11	ND
MW-6	ND	11	ND
MW-7	ND	55	89
MW-8	ND	10	ND
Field Blank	ND	10	ND
MW-7 Duplicate	ND	270	81

ND = Not Detected.

EQL = Estimated Quantitation Limit.

MW-7 and Field Duplicate analyzed at dilutions due to the presence of an unrequested analyte at high concentrations.

C.M. CHRISTIANSEN Co.
Phelps, Wisconsin

GROUNDWATER SAMPLE ANALYTICAL RESULTS: December 15, 1995

Metals (ug/L, ppb)

Groundwater Wells	Arsenic	Barium	Copper	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Zinc
MW-1	7	99	ND	ND	1	ND	ND	ND	ND	20
MW-2	1	41	ND	ND	2	ND	ND	2	ND	ND
MW-3	2	18	ND	ND	1	ND	ND	ND	ND	ND
MW-4	5	770	ND	ND	1	ND	ND	ND	ND	20
MW-5	ND	16	ND	ND	1	ND	ND	ND	ND	10
MW-6	ND	16	2	ND	ND	ND	ND	ND	ND	10
MW-7	2	37	ND	ND	ND	ND	ND	ND	ND	30
MW-8	3	28	ND	ND	2	ND	ND	ND	ND	50
Field Blank	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MW-7 Duplicate	1	34	ND	ND	ND	ND	ND	ND	ND	10
MDL (ug/L)	1	15	1	0.2	1	1	0.2	1	0.2	10

ND = Not Detected.