May 15, 1999

Mr. Paul Kozol
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53590

Re: Monthly Monitoring Report for the Oconomowoc Groundwater Treatment Facility

Dear Mr. Kozol:

Attached is the Monthly Monitoring Report for April, 1999 for the above referenced project. Questions regarding these reports should be directed to James Chang of APL, Inc. at (414) 355-5800.

Thank you for your continued cooperation and assistance with this project.

Sincerely,

Dean Groleau

Dean Groleau, Plant Superintendent
APL, Inc.

cc: Arne Thomsen, USACE, St. Paul District
Steve Peterson, USACE, Omaha District
Tom Williams, USEPA
James Chang, APL, Inc.
Mike Boehlar, Black and Veatch
David Brodzinski, WDNR, Horicon

8222 W. Calumet Road, P. O. Box 23785, Milwaukee, WI 53223 (414) 355-5800 • Fax#: (414) 355-3099
Wisconsin Dept. of Natural Resources Certificate #241340550

MONTHLY MONITORING REPORT
FOR THE
OCONOMOWOC ELECTROPLATING
GROUNDWATER TREATMENT FACILITY

ASHIPPUN, WISCONSIN 53003

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
ST. PAUL DISTRICT
HASTINGS, MINNESOTA
CONTRACT DACW37-98-C-0009

Prepared by:

APL, Inc.
8222 West Calumet Road
Milwaukee, WI 53223

May 15, 1999

1.0 Introduction

This report summarizes the monthly effluent monitoring results for the Oconomowoc Electroplating Groundwater Treatment Plant (OEGTP) for April, 1999. The OEGTP is located at the site of the former Oconomowoc Electroplating Company, in ASHIPPUN, WI.

Laboratory results of effluent sampling can be found in the Discharge Monitoring Report Form, sent under separate cover. The effluent sampling was conducted by Scott Harrison, Tony Goodman, and Dave Dugan of APL, Inc. Laboratory analysis was provided by APL, Inc., 8222 W. Calumet Road, Milwaukee WI 53223. All sampling and analyses were conducted in accordance with the Oconomowoc Electroplating Groundwater Treatment System's Chemical Data Acquisition Plan (CDAP). The parameters tested for, frequency of testing, sample type, and limits are set forth in the Final Discharge Limits, Table 1 of the Oconomowoc Electroplating Superfund Site Limits and Requirements for Discharge of Treated Groundwater, issued by the Wisconsin Department of Natural Resources (WDNR) on September 24, 1996. This report is submitted in accordance with the reporting requirements of the WDNR permit.

1.1 Site Background Review

The OEGTP is located at 2572 Oak Street in Ashippun, Wisconsin, in the NW 1/4 of the SE 1/4 of Section 30, Township 30 North, Range 17 East. The site consists of approximately 10 acres, which includes approximately 3.5 acres of the former electroplating facility. The site is bounded by Oak Street (Highway 'O') and Eva Street to the North, and Davey Creek and the Town of Ashippun's garage facilities to the South. The property directly across Oak Street is occupied by Thermogas, Inc. A residential area is located across Eva Street, and a wetlands surrounds Davey Creek.

The contact person is Arne Thomsen of the U.S. Army Corps of Engineers (USACE). Mr. Thomsen's phone number is (612) 438-3076, Fax (612) 438-2464. APL, Inc. is contracted by the USACE to operate and maintain the plant. The contact for the Treatment Plant is Dean Groleau who can be reached at (920) 474-3212, Fax (920) 474-4241. The contact for APL, Inc. is James Chang, who can be reached at (414) 355-5800, Fax (414) 355-3099.

1.2 Project Objectives

The objective of this project is to prevent the spreading of any plume of contamination that may exist at the site. Contaminated groundwater is pumped from five extraction wells, treated for cyanide, metals, suspended solids, and volatile organic compounds (VOC's). The treated water is then transferred to a groundwater effluent gallery, located south of Elm Street, near Davey Creek.

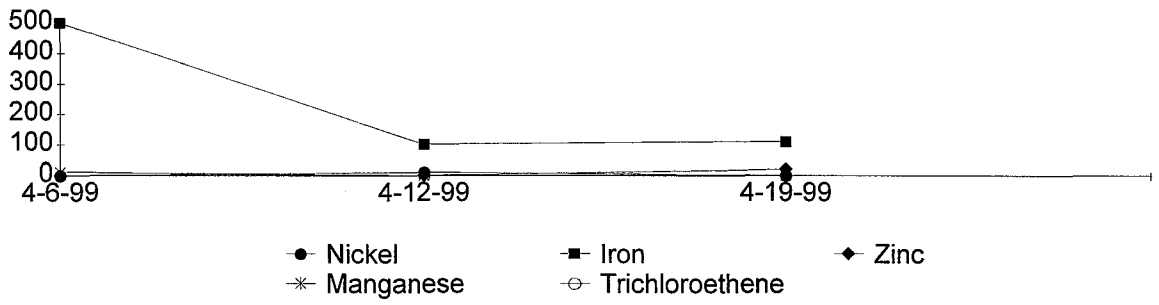
1.3 Effluent Monitoring

Weekly monitoring was conducted on April 6, 12, and 19. The weekly samples for April were tested by APL, Inc. The results of the effluent monitoring tests for the samples taken on April 6, 12, and 19 showed that Trichloroethene exceeded the limit of 0.5ug/l on the WDNR effluent discharge permit. The April 6 effluent testing showed a result of 0.8ug/l, the April 12 effluent testing showed a result of 0.7ug/l, and the April 19 effluent testing showed a result of 1.1ug/l. "The possible causes of the high levels are discussed in Section 2.0.

1.4 Monitoring Results

Results from weekly effluent monitoring can be found in the Discharge Monitoring Report Form, sent under a separate cover. Chart 1, below, shows the results of effluent monitoring for five important indicator parameters listed in the Monitoring Requirements of the Oconomowoc Electroplating Superfund Site Substantive WPDES Permit Requirements Summary (9/96). The April sampling results showed 3 exceedences in TCE.

Chart 1 - 5 Important Indicator Parameters



2.0 Plant Permit Exceedences

The possible cause for high level for VOC's in the April samplings may be due to the by-passing of the Tertiary Filtration System (TF-600) because of media binding problems. On April 9, Paul Kozol, WDNR, authorized operating the Treatment Plant with TF-600 by-passed. The Treatment Plant can continue to operate as long as there are no exceedences of Metals in the effluent. One problem that occurs with the by-passing of TF-600 that has been encountered, is that the Diffused Air Stripper Feed Pumps (TP-520/521) overfeeds the flow to the DAS-500. DAS-500 cannot handle the same amount of flow as when the TF-600 is in line. The result may be that the water is not as thoroughly stripped as it should be. The flow through the Treatment System needs to be reduced to about 23-25 GPM. The effluent is being evaluated on a week to week basis to determine if plant operations can continue. The reason for the by-passing of TF-600 was that the media has hardened below the diffuser heads and above the media up-lift system, preventing the media from being cleansed. After several media acid cleanings with little or no success, Arne Thomsen, USACE, authorized the purchase of new media to be installed after the current process modifications have been completed and tested. The new media has been ordered but will take several weeks for delivery.

2.1 Treatment Plant Shut Downs

The Treatment Plant was shut down three times for a total of 317 hours in April, 1999. The shut downs were due to the Sulfuric Acid Static Mixer (SM-401) failure, low Equalization Tank Level (EQT-100), and the Installation of Process Modifications. Table 1 shows the summary of the plant down time for the month of April, 1999.

Table 1 - Plant Down Time Summary

Date(s)	Number Hours Shut Down	Reason
4/1-2	34	SM-401 Leaking
4-10	6	Low EQT-100 Level
4/19-30	277	Installed New Process Modifications
TOTAL	**317**	

2.1.1. Shut Down Due To SM-401 Failure

On Saturday, March 27, the Treatment Plant operator discovered that the Sulfuric Acid Static Mixer (SM-401) injection quill had failed and Sulfuric Acid was spraying about 20 feet out. The concrete floor is etched from SM-401 past the Tertiary Filter Holding Tank (TFT-601) and under the third stage of the Metals Package (RMT-301). The Extraction Wells (EW'S) were shut down and plastic sheeting was hung over the leak to reduce the spray zone. The Treatment Plant continued to operate until the Equalization Tank (EQT-100) level reached <25% and shut down the Treatment System automatically. The WDNR and USACE were notified of the incident. On Monday, March 29, SM-401 was removed, cleaned, and inspected. A hole in the injection quill port was discovered. The SM-401 supplier had agreed to replace the port under warranty (it was replaced in September 1998) and to supply some alternative options to be reviewed by the USACE. The SM-401 was shipped to the supplier on March 29 and was not returned by March 31. The total down time was 98 hours up to March 31, 1999. On April 2, the SM-401 was received and installed. SM-401 was tested and no leakage was observed, so the Treatment System was restarted. The total down time for April was 34 hours.

2.1.2. Shut Down Due To Low EQT-100 Level

On April 10, the Treatment System was discovered shut down upon the arrival of the Saturday operator. The reason for the shut down was due to a low Equalization Tank (EQT-100) level that was a result from over estimating the flow needed to keep the Treatment System operating after by-passing the Tertiary Sand Filter (TF-600). See Section 2.0. The total down time was 6 hours.

2.1.3. Shut Down Due To Installation of New Process Modifications

On April 19 to 30, the Treatment System had been shut down to install the new process modifications. During the shut down, the Metals Package had been drained to the Sludge Holding Tank (ST-820) and the sludge had been removed. The Tertiary Filter (TF-600) had the polymer-bound sand removed and added to the sludge hopper. The Sulfuric Acid Pumping Station (SAP-751/752) had been completely rebuilt and a new Sulfuric Acid Pump (SAP-753) had been added for the new Neutralization Stage (RMT-451). The Sodium Hypochlorite Pumping Station (SCP-251/252) had been completely rebuilt. The old Polymer Pumping Station (PFU-350/351) had been moved and the new Dilute Polymer Pumping Station (PFU-352/353) had been installed. The Granulated Activated Carbon Filters (GAC-650/651) had the spent Carbon removed and the new activated Carbon installed.

4.0 Summary

Groundwater Treatment Plant effluent monitoring was conducted on April 6, 12, and 19 of 1999. The laboratory results of these samples show that all contaminants listed in the Requirements of the Oconomowoc Electroplating Superfund Site Substantive WPDES Permit Requirements Summary (9/96) comply with the permit except for TCE on April 6, 12, and 19. See Chart 1, Section 1.4 for important indicator parameters.

During the month of April, 1999, the plant was shut down three times for a total of 317 hours. See Table 1, Section 2.1 for shut down times. All equipment operation and maintenance related issues are detailed in a separate report, entitled "*Monthly Operation and Maintenance Report for the Oconomowoc Electroplating Groundwater Treatment Facility*". That report will be submitted by May 15, 1999.

OCONOMOWOC GROUNDWATER TREATMENT PLANT							
Weekly Sampling Results					Date:	4-6-99	
Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l	
pH	7.1	11	N/A	N/A	8.2	Monitor	
TSS	NT	NT	NT	NT	NT	Monitor	mg/l
Arsenic	ND	NT	NT	NT	ND	5	
Barium	100	NT	NT	NT	20	400	
Cadmium	ND	NT	NT	NT	ND	0.5	
Cadmium Total Recoverable	ND	NT	NT	NT	ND	Monitor	
Chromium +6	ND	NT	NT	NT	ND	Monitor	
Chromium Total	ND	NT	NT	NT	ND	10	
Copper	ND	NT	NT	NT	8	Monitor	
Iron	1000	NT	NT	NT	500	Monitor	
Lead	3.2	NT	NT	NT	ND	1.5	
Manganese	200	NT	NT	NT	10	Monitor	
Mercury	ND	NT	NT	NT	ND	0.2	
Nickel	29	NT	NT	NT	ND	20	
Selenium	16	NT	NT	NT	ND	10	
Silver	ND	NT	NT	NT	ND	10	
Thallium	ND	NT	NT	NT	ND	0.4	
Zinc	ND	NT	NT	NT	ND	Monitor	
Cyanide	ND	NT	NT	NT	ND	40	
Cyanide Free	ND	NT	NT	NT	ND	Monitor	
1,1-dichloroethane	21	NT	NT	NT	0.3	85	
1,2-dichloroethane	ND	NT	NT	NT	ND	0.5	
1,1-dichloroethene	17	NT	NT	NT	ND	0.7	
1,2-dichloroethene cis	44	NT	NT	NT	0.3	7	
1,2-dichloroethene trans	17	NT	NT	NT	ND	20	
Ethylbenzene	ND	NT	NT	NT	ND	140	
Methylene Chloride	ND	NT	NT	NT	ND	0.5	
Tetrachloroethene	8.6	NT	NT	NT	ND	0.5	
Toluene	ND	NT	NT	NT	ND	68	
1,1,1-trichloroethane	251	NT	NT	NT	0.9	40	
1,1,2-trichloroethane	ND	NT	NT	NT	ND	0.5	
TCE	571	NT	NT	NT	0.8	0.5	
Vinyl Chloride	ND	NT	NT	NT	ND	0.2	
Xylene Total	ND	NT	NT	NT	ND	124	
COD	NT	NT	NT	NT	NT	Monitor	mg/l
Phosphorus total	NT	NT	NT	NT	NT	Monitor	mg/l
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor	mg/l
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor	mg/l

OCONOMOWOC GROUNDWATER TREATMENT PLANT							
Weekly Sampling Results					Date:	4-12-99	
Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l	
pH	6.9	11	N/A	N/A	NT	Monitor	
TSS	NT	NT	NT	NT	NT	Monitor	mg/l
Arsenic	ND	NT	NT	NT	ND	5	
Barium	90	NT	NT	NT	20	400	
Cadmium	ND	NT	NT	NT	ND	0.5	
Cadmium Total Recoverable	ND	NT	NT	NT	ND	Monitor	
Chromium +6	ND	NT	NT	NT	ND	Monitor	
Chromium Total	ND	NT	NT	NT	ND	10	
Copper	ND	NT	NT	NT	ND	Monitor	
Iron	700	NT	NT	NT	100	Monitor	
Lead	ND	NT	NT	NT	ND	1.5	
Manganese	100	NT	NT	NT	ND	Monitor	
Mercury	ND	NT	NT	NT	ND	0.2	
Nickel	37	NT	NT	NT	11	20	
Selenium	16	NT	NT	NT	ND	10	
Silver	ND	NT	NT	NT	ND	10	
Thallium	ND	NT	NT	NT	ND	0.4	
Zinc	20	NT	NT	NT	ND	Monitor	
Cyanide	ND	NT	NT	NT	ND	40	
Cyanide Free	ND	NT	NT	NT	ND	Monitor	
1,1-dichloroethane	29	NT	NT	NT	ND	85	
1,2-dichloroethane	ND	NT	NT	NT	ND	0.5	
1,1-dichloroethene	22	NT	NT	NT	ND	0.7	
1,2-dichloroethene cis	60	NT	NT	NT	ND	7	
1,2-dichloroethene trans	21	NT	NT	NT	ND	20	
Ethylbenzene	ND	NT	NT	NT	0.4	140	
Methylene Chloride	ND	NT	NT	NT	ND	0.5	
Tetrachloroethene	11	NT	NT	NT	ND	0.5	
Toluene	ND	NT	NT	NT	ND	68	
1,1,1-trichloroethane	368	NT	NT	NT	0.6	40	
1,1,2-trichloroethane	ND	NT	NT	NT	ND	0.5	
TCE	820	NT	NT	NT	0.7	0.5	
Vinyl Chloride	ND	NT	NT	NT	ND	0.2	
Xylene Total	ND	NT	NT	NT	1.5	124	
COD	NT	NT	NT	NT	NT	Monitor	mg/l
Phosphorus total	NT	NT	NT	NT	NT	Monitor	mg/l
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor	mg/l
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor	mg/l

OCONOMOWOC GROUNDWATER TREATMENT PLANT							
Weekly Sampling Results					Date:	4-19-99	
Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l	
pH	7.1	11	N/A	N/A	8.1	Monitor	
TSS	1	NT	NT	NT	ND	Monitor	mg/l
Arsenic	ND	NT	NT	NT	ND	5	
Barium	100	NT	NT	NT	40	400	
Cadmium	ND	NT	NT	NT	ND	0.5	
Cadmium Total Recoverable	ND	NT	NT	NT	ND	Monitor	
Chromium +6	ND	NT	NT	NT	ND	Monitor	
Chromium Total	ND	NT	NT	NT	ND	10	
Copper	ND	NT	NT	NT	ND	Monitor	
Iron	870	NT	NT	NT	110	Monitor	
Lead	ND	NT	NT	NT	ND	1.5	
Manganese	160	NT	NT	NT	ND	Monitor	
Mercury	ND	NT	NT	NT	ND	0.2	
Nickel	45	NT	NT	NT	ND	20	
Selenium	ND	NT	NT	NT	ND	10	
Silver	ND	NT	NT	NT	ND	10	
Thallium	ND	NT	NT	NT	ND	0.4	
Zinc	ND	NT	NT	NT	20	Monitor	
Cyanide	ND	NT	NT	NT	ND	40	
Cyanide Free	ND	NT	NT	NT	ND	Monitor	
1,1-dichloroethane	27	NT	ND	NT	ND	85	
1,2-dichloroethane	ND	NT	ND	NT	ND	0.5	
1,1-dichloroethene	19	NT	ND	NT	ND	0.7	
1,2-dichloroethene cis	57	NT	ND	NT	0.3	7	
1,2-dichloroethene trans	19	NT	ND	NT	ND	20	
Ethylbenzene	ND	NT	ND	NT	ND	140	
Methylene Chloride	ND	NT	ND	NT	ND	0.5	
Tetrachloroethene	10	NT	ND	NT	ND	0.5	
Toluene	ND	NT	ND	NT	ND	68	
1,1,1-trichloroethane	317	NT	0.5	NT	0.7	40	
1,1,2-trichloroethane	ND	NT	ND	NT	ND	0.5	
TCE	800	NT	2	NT	1.1	0.5	
Vinyl Chloride	ND	NT	ND	NT	ND	0.2	
Xylene Total	ND	NT	ND	NT	ND	124	
COD	ND	NT	NT	NT	10	Monitor	mg/l
Phosphorus total	NT	NT	NT	NT	0.05	Monitor	mg/l
Nitrate + Nitrite	NT	NT	NT	NT	0.93	Monitor	mg/l
Ammonia Nitrogen	NT	NT	NT	NT	ND	Monitor	mg/l

FLOW FROM EXTRACTION WELLS

YEAR: 1999

MONTH: APR. DAY	FE-100 FLOW TOTALIZER	TOTAL DAY'S FLOW (GAL.)	DAILY FLOW MGD	
1	2,857,665.75	0.00	0.000	SHUT DOWN
2	2,857,665.75	14,413.50	0.014	SHUT DOWN
3	2,872,079.25	18,980.25	0.019	
4	2,891,059.50	23,161.75	0.023	
5	2,914,221.25	20,582.50	0.021	
6	2,934,803.75	14,992.25	0.015	
7	2,949,796.00	14,350.00	0.014	
8	2,964,146.00	18,955.75	0.019	
9	2,983,101.75	20,813.50	0.021	
10	3,003,915.25	25,134.00	0.025	SHUT DOWN
11	3,029,049.25	25,039.25	0.025	
12	3,054,088.50	30,100.50	0.030	
13	3,084,189.00	23,093.50	0.023	
14	3,107,282.50	23,696.50	0.024	
15	3,130,979.00	23,379.50	0.023	
16	3,154,358.50	15,160.50	0.015	
17	3,169,519.00	30,535.25	0.031	
18	3,200,054.25	16,241.25	0.016	
19	3,216,295.50	0.00	0.000	SHUT DOWN
20	3,216,295.50	0.00	0.000	SHUT DOWN
21	3,216,295.50	0.00	0.000	SHUT DOWN
22	3,216,295.50	0.00	0.000	SHUT DOWN
23	3,216,295.50	0.00	0.000	SHUT DOWN
24	3,216,295.50	0.00	0.000	SHUT DOWN
25	3,216,295.50	0.00	0.000	SHUT DOWN
26	3,216,295.50	0.00	0.000	SHUT DOWN
27	3,216,295.50	0.00	0.000	SHUT DOWN
28	3,216,295.50	0.00	0.000	SHUT DOWN
29	3,216,295.50	0.00	0.000	SHUT DOWN
30	3,216,295.50	0.00	0.000	SHUT DOWN
MAY 1	3,216,295.50			SHUT DOWN
		TOTAL	0.359	
		AVERAGE	0.012	

FLOW FROM EQT-100

YEAR: 1999

MONTH: APR. DAY	FE-112 FLOW TOTALIZER	TOTAL DAY'S FLOW (GAL.)	DAILY FLOW MGD	
1	8,596,943.00	8,407.00	0.008	SHUT DOWN
2	8,605,350.00	39,629.00	0.040	SHUT DOWN
3	8,644,979.00	25,213.00	0.025	
4	8,670,192.00	30,936.00	0.031	
5	8,701,128.00	42,259.00	0.042	
6	8,743,387.00	39,294.00	0.039	
7	8,782,681.00	43,202.00	0.043	
8	8,825,883.00	43,690.00	0.044	
9	8,869,573.00	23,558.00	0.024	
10	8,893,131.00	33,111.00	0.033	SHUT DOWN
11	8,926,242.00	31,560.00	0.032	
12	8,957,802.00	39,997.00	0.040	
13	8,997,799.00	31,591.00	0.032	
14	9,029,390.00	33,020.00	0.033	
15	9,062,410.00	33,042.00	0.033	
16	9,095,452.00	21,760.00	0.022	
17	9,117,212.00	44,313.00	0.044	
18	9,161,525.00	27,776.00	0.028	
19	9,189,301.00	0.00	0.000	SHUT DOWN
20	9,189,301.00	0.00	0.000	SHUT DOWN
21	9,189,301.00	0.00	0.000	SHUT DOWN
22	9,189,301.00	0.00	0.000	SHUT DOWN
23	9,189,301.00	0.00	0.000	SHUT DOWN
24	9,189,301.00	0.00	0.000	SHUT DOWN
25	9,189,301.00	0.00	0.000	SHUT DOWN
26	9,189,301.00	40.00	0.000	SHUT DOWN
27	9,189,341.00	6,156.00	0.006	SHUT DOWN
28	9,195,497.00	748.00	0.001	SHUT DOWN
29	9,196,245.00	0.00	0.000	SHUT DOWN
30	9,196,245.00	0.00	0.000	SHUT DOWN
May 01	9,196,245.00			SHUT DOWN
		TOTAL	0.599	
		AVERAGE	0.020	

EFFLUENT FLOW FROM PLANT

YEAR: 1999

MONTH: APR. DAY	NPDES STATION TOTALIZER	TOTAL DAY'S FLOW (GAL.)	X2	DAILY FLOW MGD	
1	2,347,446.00	1,355.25	2,710.50	0.003	SHUT DOWN
2	2,348,801.25	11,374.25	22,748.50	0.023	SHUT DOWN
3	2,360,175.50	12,521.00	25,042.00	0.025	
4	2,372,696.50	10,890.00	21,780.00	0.022	
5	2,383,586.50	9,453.75	18,907.50	0.019	
6	2,393,040.25	3,672.25	7,344.50	0.007	
7	2,396,712.50	15,722.25	31,444.50	0.031	
8	2,412,434.75	8,795.25	17,590.50	0.018	
9	2,421,230.00	11,987.25	23,974.50	0.024	
10	2,433,217.25	14,727.75	29,455.50	0.029	SHUT DOWN
11	2,447,945.00	14,626.75	29,253.50	0.029	
12	2,462,571.75	19,618.75	39,237.50	0.039	
13	2,482,190.50	15,054.00	30,108.00	0.030	
14	2,497,244.50	15,756.75	31,513.50	0.032	
15	2,513,001.25	15,492.00	30,984.00	0.031	
16	2,528,493.25	11,425.50	22,851.00	0.023	
17	2,539,918.75	21,052.25	42,104.50	0.042	
18	2,560,971.00	13,712.00	27,424.00	0.027	
19	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
20	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
21	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
22	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
23	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
24	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
25	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
26	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
27	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
28	2,574,683.00	0.00	0.00	0.000	SHUT DOWN
29	2,574,683.00	40.25	80.50	0.000	SHUT DOWN
30	2,574,723.25	0.00	0.00	0.000	SHUT DOWN
May 01	2,574,723.25				SHUT DOWN
			TOTAL	0.455	
			AVERAGE	0.015	

MONITOR WELL DEPTHS

OCONOMOWOC GROUNDWATER TREATMENT PLANT						
MONITORING WELLS		WATER LEVEL		FEET		
DATE	MW02DP	MW03SP	MW05P	MW05DP	MW06P	MW11BP
July 31, 1998	6.64	DRY	3.74	4.26	8.00	COVERED
Aug. 31, 1998	7.70	DRY	DRY	5.34	8.70	COVERED
Sept. 17, 1998	7.50	DRY	DRY	5.00	8.66	COVERED
Oct. 7, 1998	6.50	DRY	3.75	4.10	8.34	COVERED
Nov. 23, 1998	6.66	DRY	DRY	4.37	8.17	COVERED
Dec. 15, 1998	5.90	DRY	3.40	3.75	8.20	COVERED
Jan. 18, 1999	6.60	DRY	3.75	4.72	8.25	COVERED
Feb. 3, 1999	5.36	6.10	3.15	2.90	7.15	COVERED
Mar. 3-4, 1999	5.51	DRY	3.20	3.04	7.40	COVERED
Apr. 15, 1999	5.30	6.20	3.25	4.40	6.92	COVERED

MONITOR WELL DEPTHS

OCONOMOWOC GROUNDWATER TREATMENT PLANT						
MONITORING WELLS		WATER LEVEL	FEET			
DATE	MW12BP	MW12DP	MW13SP	MW14DP	MW15DP	MW16SP
July 31, 1998	4.75	3.78	5.75	4.80	10.49	UNACCESS.
Aug. 31, 1998	5.64	4.48	6.38	4.80	11.64	UNACCESS.
Sept. 17, 1998	5.35	3.20	6.31	4.86	11.10	UNACCESS.
Oct. 7, 1998	4.75	3.65	5.79	4.75	10.60	UNACCESS.
Nov. 23, 1998	4.73	3.70	5.82	4.56	10.46	UNACCESS.
Dec. 15, 1998	4.10	3.00	5.85	4.70	9.95	UNACCESS.
Jan. 18, 1999	4.70	3.70	5.70	5.00	10.50	UNACCESS.
Feb. 3, 1999	3.50	2.48	4.85	3.00	9.27	UNACCESS.
Mar. 3-4, & 16, 1999	3.50	2.70	5.15	3.40	9.20	2.95
Apr. 15,1999	3.61	3.20	4.84	2.60	9.25	2.63

APL INC.

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990242
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C) Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Nova Sample Number: 14634
Client ID: 990406WA01P
Collection: 4/6/99 Time: 12:37
Sample Description:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	4/15/99	990669	
Barium - ICAP	0.11	mg/l	RJ	0.003	0.010	200.7	dmd	4/7/99	990631	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	4/14/99	990664	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	4/7/99	990631	
Copper- ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	4/7/99	990631	
Iron - ICAP	0.99	mg/l	RJ	0.071	0.23	200.7	dmd	4/7/99	990631	
Lead - Furnace AA	3.2	ug/l	J RJ	1.1	3.5	239.2	dmd	4/14/99	990663	
Manganese - ICAP	0.18	mg/l	RJ	0.009	0.03	200.7	dmd	4/7/99	990631	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	dmd	4/9/99	990654	
Nickel - ICAP	29	ug/l	J RJ	11	35	200.7	dmd	4/7/99	990631	
Selenium - Furnace AA	16	ug/l	J RJ	7.8	25	270.2	dmd	4/15/99	990670	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	4/7/99	990631	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	4/7/99	990633	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	4/7/99	990631	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	805353	4/7/99	990677	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	805353	4/15/99	990679	
Cyanide, Total	<0.0077	mg/l		0.008	0.02	335.2	805353	4/15/99	990680	
pH (water)	7.1	s.u.	#			150.1	srh	4/6/99	990638	

Nova Sample Number: 14635
Client ID: 990406WA09R
Collection: 4/6/99 Time: 12:49
Sample Description:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	4/15/99	990669	
Barium - ICAP	0.02	mg/l	RJ	0.003	0.010	200.7	dmd	4/7/99	990631	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	4/14/99	990664	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	4/7/99	990631	
Copper- ICAP	0.008	mg/l	J RJ	0.008	0.03	200.7	dmd	4/7/99	990631	
Iron - ICAP	0.49	mg/l	RJ	0.071	0.23	200.7	dmd	4/7/99	990631	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	4/14/99	990663	
Manganese - ICAP	0.01	mg/l	J RJ	0.009	0.03	200.7	dmd	4/7/99	990631	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	dmd	4/9/99	990654	
Nickel - ICAP	<11	ug/l	RJ	11	35	200.7	dmd	4/7/99	990631	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	4/15/99	990670	

APL INC.

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990242
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C) Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun, WI 53003

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	4/7/99	990631	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	4/7/99	990633	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	4/7/99	990631	
Nova Sample Number: 14636										
Client ID: 990406WA02P								Collection: 4/6/99		Time: 12:44
								Sample Description:		
pH (water)	10	s.u.	#			150.1	srh	4/6/99	990638	
Nova Sample Number: 14637										
Client ID: 990406WA03P								Collection: 4/6/99		Time: 12:45
								Sample Description:		
pH (water)	11	s.u.	#			150.1	srh	4/6/99	990638	
Nova Sample Number: 14638										
Client ID: 990406WA05P								Collection: 4/6/99		Time: 12:40
								Sample Description:		
pH (water)	7.6	s.u.	#			150.1	srh	4/6/99	990638	
Nova Sample Number: 14639										
Client ID: 990406WA09P								Collection: 4/6/99		Time: 12:30
								Sample Description:		
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	805353	4/7/99	990677	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	805353	4/15/99	990679	
Cyanide, Total	<0.0077	mg/l		0.008	0.02	335.2	805353	4/15/99	990680	
pH (water)	8.2	s.u.	#			150.1	srh	4/6/99	990638	

Approved By: _____ **Date:** 4/19/99
James Chang, Ph.D., Lab Director

RJ ***Result expressed as Total.***
TTR ***Result expressed as total and total recoverable.***

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.
LOQ = 10 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

APL Environmental
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990242**
DATE REPORTED: 08-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 14634		QC Prep Batch Number: 990640					*Sample analyzed within*	*1*	*Day(s) from collection.*	
Client ID: 990406WA01P	Sample Description:						*Collection:*	*4/6/99*	*Time:*	*12:37*
1,1,1,2-Tetrachloroethane	<4	ug/l	4	13	ns	20		8260	srh	4/7/99
1,1,1-Trichloroethane	251	ug/l	4.6	15	40	20		8260	srh	4/7/99
1,1,2,2-Tetrachloroethane	<5.8	ug/l	5.8	18	0.02	20		8260	srh	4/7/99
1,1,2-Trichloroethane	<5.8	ug/l	5.8	18	0.5	20		8260	srh	4/7/99
1,1-Dichloroethane	21	ug/l	3	9.5	85	20		8260	srh	4/7/99
1,1-Dichloroethene	17	ug/l	7.2	23	0.7	20	J	8260	srh	4/7/99
1,1-Dichloropropene	<9.8	ug/l	9.8	31	ns	20		8260	srh	4/7/99
1,2,3-Trichlorobenzene	<4.4	ug/l	4.4	14	ns	20		8260	srh	4/7/99
1,2,3-Trichloropropane	<12	ug/l	12	38	ns	20		8260	srh	4/7/99
1,2,4-Trichlorobenzene	<3.2	ug/l	3.2	10	14	20		8260	srh	4/7/99
1,2,4-Trimethylbenzene	<5.8	ug/l	5.8	18	ns	20		8260	srh	4/7/99
1,2-Dibromoethane	<4.8	ug/l	4.8	15	0.005	20		8260	srh	4/7/99
1,2-Dichlorobenzene	<4	ug/l	4	13	60	20		8260	srh	4/7/99
1,2-Dichloroethane	<3.8	ug/l	3.8	12	0.5	20		8260	srh	4/7/99
1,2-Dichloropropane	<4.6	ug/l	4.6	15	0.5	20		8260	srh	4/7/99
1,3,5-Trimethylbenzene	<4.6	ug/l	4.6	15	ns	20		8260	srh	4/7/99
1,3-Dichlorobenzene	<3.8	ug/l	3.8	12	125	20		8260	srh	4/7/99
1,3-Dichloropropane	<4.2	ug/l	4.2	13	ns	20		8260	srh	4/7/99
1,4-Dichlorobenzene	<3	ug/l	3	9.5	15	20		8260	srh	4/7/99
12Dibromo-3-chloropropan	<12	ug/l	12	38	0.02	20		8260	srh	4/7/99
2,2-Dichloropropane	<8	ug/l	8	25	ns	20		8260	srh	4/7/99
2-Butanone (MEK)	<28	ug/l	28	88	90	20		8260	srh	4/7/99
2-Chloroethyl Vinyl Ether	<5.8	ug/l	5.8	18	ns	20		8260	srh	4/7/99
2-Chlorotoluene	<3	ug/l	3	9.5	ns	20		8260	srh	4/7/99
4-Chlorotoluene	<5	ug/l	5	16	ns	20		8260	srh	4/7/99
4-Methyl-2-Pentanone	<17	ug/l	17	53	50	20		8260	srh	4/7/99
Acetone	<31	ug/l	31	99	200	20		8260	srh	4/7/99
Benzene	<3.8	ug/l	3.8	12	0.5	20		8260	srh	4/7/99
Bromobenzene	<3.8	ug/l	3.8	12	ns	20		8260	srh	4/7/99
Bromochloromethane	<6.8	ug/l	6.8	22	ns	20		8260	srh	4/7/99
Bromodichloromethane	<5.2	ug/l	5.2	17	0.06	20		8260	srh	4/7/99
Bromoform	<9.4	ug/l	9.4	30	0.44	20		8260	srh	4/7/99
Bromomethane	<4.2	ug/l	4.2	13	1	20		8260	srh	4/7/99
Carbon tetrachloride	<4.4	ug/l	4.4	14	0.5	20		8260	srh	4/7/99
Chlorobenzene	<4	ug/l	4	13	20	20		8260	srh	4/7/99
Chloroethane	<23	ug/l	23	74	80	20		8260	srh	4/7/99
Chloroform	<5.4	ug/l	5.4	17	0.6	20		8260	srh	4/7/99
Chloromethane	<15	ug/l	15	49	0.3	20		8260	srh	4/7/99
cis-1,2-Dichloroethene	44	ug/l	4	13	7	20		8260	srh	4/7/99
cis-1,3-Dichloropropene	<4.8	ug/l	4.8	15	0.02	20		8260	srh	4/7/99

APL Environmental
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990242**
DATE REPORTED: 08-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<4.2	ug/l	4.2	13	6	20		8260	srh	4/7/99
Dibromomethane	<7	ug/l	7	22	ns	20		8260	srh	4/7/99
Dichlorodifluoromethane	<7.2	ug/l	7.2	23	200	20		8260	srh	4/7/99
Ethylbenzene	<3.2	ug/l	3.2	10	140	20		8260	srh	4/7/99
Hexachlorobutadiene	<4.4	ug/l	4.4	14	ns	20		8260	srh	4/7/99
Isopropyl Ether	<6.4	ug/l	6.4	20	ns	20		8260	srh	4/7/99
Isopropylbenzene	<3.2	ug/l	3.2	10	ns	20		8260	srh	4/7/99
m&p-xylene	<7.2	ug/l	7.2	23	124	20		8260	srh	4/7/99
Methyl-t-butyl ether	<4.2	ug/l	4.2	13	12	20		8260	srh	4/7/99
Methylene chloride	<15	ug/l	15	48	0.5	20		8260	srh	4/7/99
n-Butylbenzene	<4.6	ug/l	4.6	15	ns	20		8260	srh	4/7/99
n-Propylbenzene	<5	ug/l	5	16	ns	20		8260	srh	4/7/99
Naphthalene	<9.2	ug/l	9.2	29	8	20		8260	srh	4/7/99
o-xylene	<3.6	ug/l	3.6	11	124	20		8260	srh	4/7/99
p-Isopropyltoluene	<3.6	ug/l	3.6	11	ns	20		8260	srh	4/7/99
sec-Butylbenzene	<6	ug/l	6	19	ns	20		8260	srh	4/7/99
Styrene	<4.2	ug/l	4.2	13	10	20		8260	srh	4/7/99
tert-Butylbenzene	<4	ug/l	4	13	ns	20		8260	srh	4/7/99
Tetrachloroethene	8.6	ug/l	5.8	18	0.5	20	J	8260	srh	4/7/99
Toluene	<6.6	ug/l	6.6	21	68.6	20		8260	srh	4/7/99
trans-1,2-Dichloroethene	17	ug/l	3.2	10	20	20		8260	srh	4/7/99
trans-1,3-Dichloropropene	<4	ug/l	4	13	0.02	20		8260	srh	4/7/99
Trichloroethene	571	ug/l	3.2	10	0.5	20		8260	srh	4/7/99
Trichlorofluoromethane	<6.8	ug/l	6.8	22	ns	20		8260	srh	4/7/99
Vinyl chloride	<4.2	ug/l	4.2	13	0.02	20		8260	srh	4/7/99

Sample Number: **14639** QC Prep Batch Number: 990640 *Sample analyzed within 1 Day(s) from collection.*
Client ID: **990406WA09P** Sample Description: *Collection: 4/6/99 Time: 12:30*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
1,1,1-Trichloroethane	0.9	ug/l	0.2	0.7	40	1		8260	srh	4/7/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/7/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/7/99
1,1-Dichloroethane	0.3	ug/l	0.2	0.5	85	1	J	8260	srh	4/7/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/7/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/7/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/7/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/7/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/7/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/7/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/7/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/7/99

APL Environmental
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990242**
DATE REPORTED: 08-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/7/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	4/7/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	4/7/99
12Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/7/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/7/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	4/7/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/7/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/7/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/7/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	4/7/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	4/7/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/7/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/7/99
Bromodichloromethane	1.7	ug/l	0.3	0.8	0.06	1		8260	srh	4/7/99
Bromoform	<0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/7/99
Bromomethane	<0.2	ug/l	0.2	0.7	1	1		8260	srh	4/7/99
Carbon tetrachloride	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/7/99
Chlorobenzene	<0.2	ug/l	0.2	0.6	20	1		8260	srh	4/7/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	srh	4/7/99
Chloroform	3.4	ug/l	0.3	0.9	0.6	1		8260	srh	4/7/99
Chloromethane	<0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/7/99
cis-1,2-Dichloroethene	0.3	ug/l	0.2	0.6	7	1	J	8260	srh	4/7/99
cis-1,3-Dichloropropene	<0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/7/99
Dibromochloromethane	1	ug/l	0.2	0.7	6	1		8260	srh	4/7/99
Dibromomethane	<0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/7/99
Dichlorodifluoromethane	<0.4	ug/l	0.4	1.1	200	1		8260	srh	4/7/99
Ethylbenzene	<0.2	ug/l	0.2	0.5	140	1		8260	srh	4/7/99
Hexachlorobutadiene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
Isopropyl Ether	<0.3	ug/l	0.3	1	ns	1		8260	srh	4/7/99
Isopropylbenzene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/7/99
m&p-xylene	<0.4	ug/l	0.4	1.1	124	1		8260	srh	4/7/99
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	4/7/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/7/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/7/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	4/7/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	4/7/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	4/7/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	4/7/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990242**
DATE REPORTED: 08-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/7/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	4/7/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	4/7/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/7/99
Trichloroethene	0.8	ug/l	0.2	0.5	0.5	1		8260	srh	4/7/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/7/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/7/99

Sample Number: **14640** QC Prep Batch Number: 990640 *Sample analyzed within 1 Day(s) from collection.*
Client ID: **Trip Blank** Sample Description: *Collection: 4/6/99 Time:*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
1,1,1-Trichloroethane	<0.2	ug/l	0.2	0.7	40	1		8260	srh	4/7/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/7/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/7/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	4/7/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/7/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/7/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/7/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/7/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/7/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/7/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/7/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/7/99
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/7/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	4/7/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	4/7/99
12Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/7/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/7/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	4/7/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/7/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/7/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/7/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	4/7/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	4/7/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/7/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/7/99
Bromodichloromethane	<0.3	ug/l	0.3	0.8	0.06	1		8260	srh	4/7/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990242**
DATE REPORTED: 08-Apr-99
DATE RECEIVED: 07-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 6th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/7/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	4/7/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/7/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	4/7/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	4/7/99
Chloroform	< 0.3	ug/l	0.3	0.9	0.6	1		8260	srh	4/7/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/7/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	4/7/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/7/99
Dibromochloromethane	< 0.2	ug/l	0.2	0.7	6	1		8260	srh	4/7/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/7/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	4/7/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	4/7/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/7/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/7/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	4/7/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	4/7/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/7/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/7/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/7/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	4/7/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	4/7/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/7/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	4/7/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/7/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/7/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	4/7/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	4/7/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/7/99
Trichloroethene	< 0.2	ug/l	0.2	0.5	0.5	1		8260	srh	4/7/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/7/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/7/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER:	**990242**
DATE REPORTED:	08-Apr-99
DATE RECEIVED:	07-Apr-99
SAMPLE TEMP (C):	Rec On Ice
PROJECT ID:	April 6th
PROJECT NAME:	Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal

Approved By: _____ **Date:** 4/9/99
James Chang, Ph.D. , Lab Director

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B *"e" = Estimate value, over calibration range .*
LOQ = 10 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
PAL: Preventive Action Limit, NR 140.10 Public health related groundwater standards. "ns" = not specified
RQ : Run Qualifier; "J" = Results between LOD and LOQ. "RR" = Re-extract Rerun sample, "B" = Showed in Blank sample.

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

INORGANIC REPORT

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

WDNR# 241340550

INVOICE NUMBER **990258**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

Nova Sample Number: 14700
Client ID: **990412WA01P**
Collection: 4/12/99 Time: 16:30
Sample Description:

Test	Result	Units		RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Arsenic - Furnace AA	**<9.9**	**ug/l**		**RJ**	9.9	31	206.2	dmd	4/15/99	*990669*	
Barium - ICAP	**0.09**	**mg/l**		**RJ**	0.003	0.010	200.7	dmd	4/20/99	*990712*	
Cadmium - Furnace AA	**<0.7**	**ug/l**		**TTR**	0.7	2.2	213.2	dmd	4/14/99	*990664*	
Chromium, Total - ICAP	**<0.01**	**mg/l**		**RJ**	0.01	0.03	200.7	dmd	4/20/99	*990712*	
Copper- ICAP	**<0.008**	**mg/l**		**RJ**	0.008	0.03	200.7	dmd	4/20/99	*990712*	
Iron - ICAP	**0.7**	**mg/l**		**RJ**	0.071	0.2	200.7	dmd	4/20/99	*990712*	
Lead - Furnace AA	**<1.1**	**ug/l**		**RJ**	1.1	3.5	239.2	dmd	4/14/99	*990663*	
Manganese - ICAP	**0.1**	**mg/l**		**RJ**	0.009	0.03	200.7	dmd	4/20/99	*990712*	
Mercury CV	**<0.0002**	**mg/l**			0.0002	0.0006	245.1	dmd	4/16/99	*990694*	
Nickel - ICAP	**37**	**ug/l**		**RJ**	11	35	200.7	dmd	4/20/99	*990712*	
Selenium - Furnace AA	**16**	**ug/l**	*J*	**RJ**	7.8	25	270.2	dmd	4/15/99	*990670*	
Silver - ICAP	**<0.006**	**mg/l**		**RJ**	0.006	0.02	200.7	dmd	4/20/99	*990712*	
Thallium - Furnace AA	**<5.0**	**ug/l**		**RJ**	5	16	279.2	dmd	4/20/99	*990711*	
Zinc - ICAP	**0.02**	**mg/l**	*J*	**RJ**	0.021	0.07	200.7	dmd	4/20/99	*990712*	
Chromium, Hexavalent	**<0.0042**	**mg/l**			0.004	0.01	SM 3500D	80535	4/13/99	*990713*	
Cyanide, Amenable	**<0.018**	**mg/l**			0.018	0.06	335.2	van	4/20/99	*990706*	
Cyanide, Total	**<0.018**	**mg/l**			0.018	0.06	335.2	van	4/20/99	*990705*	
pH (water)	**6.9**	**s.u.**	#				150.1	tg	4/12/99	*990658*	

Nova Sample Number: 14701
Client ID: **990412WA09R**
Collection: 4/12/99 Time: 17:00
Sample Description:

Arsenic - Furnace AA	**<9.9**	**ug/l**		**RJ**	9.9	31	206.2	dmd	4/15/99	*990669*	
Barium - ICAP	**0.02**	**mg/l**		**RJ**	0.003	0.010	200.7	dmd	4/20/99	*990712*	
Cadmium - Furnace AA	**<0.7**	**ug/l**		**TTR**	0.7	2.2	213.2	dmd	4/14/99	*990664*	
Chromium, Total - ICAP	**<0.01**	**mg/l**		**RJ**	0.01	0.03	200.7	dmd	4/20/99	*990712*	
Copper- ICAP	**<0.008**	**mg/l**		**RJ**	0.008	0.03	200.7	dmd	4/20/99	*990712*	
Iron - ICAP	**0.1**	**mg/l**	*J*	**RJ**	0.071	0.2	200.7	dmd	4/20/99	*990712*	
Lead - Furnace AA	**<1.1**	**ug/l**		**RJ**	1.1	3.5	239.2	dmd	4/14/99	*990663*	
Manganese - ICAP	**<0.009**	**mg/l**		**RJ**	0.009	0.03	200.7	dmd	4/20/99	*990712*	
Mercury CV	**<0.0002**	**mg/l**			0.0002	0.0006	245.1	dmd	4/16/99	*990694*	
Nickel - ICAP	**11**	**ug/l**	*J*	**RJ**	11	35	200.7	dmd	4/20/99	*990712*	
Selenium - Furnace AA	**<7.8**	**ug/l**		**RJ**	7.8	25	270.2	dmd	4/15/99	*990670*	

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990258
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	**<0.006**	**mg/l**	**RJ**	0.006	0.02	200.7	dmd	4/20/99	*990712*	
Thallium - Furnace AA	**<5.0**	**ug/l**	**RJ**	5	16	279.2	dmd	4/20/99	*990711*	
Zinc - ICAP	**<0.021**	**mg/l**	**RJ**	0.021	0.07	200.7	dmd	4/20/99	*990712*	
Nova Sample Number: 14702										
Client ID: **990412WA02P**							Collection: 4/12/99		Time: 16:40	
							Sample Description:			
pH (water)	**9.9**	**s.u.**	**#**			150.1	tg	4/12/99	*990658*	
Nova Sample Number: 14703										
Client ID: **990412WA03P**							Collection: 4/12/99		Time: 16:50	
							Sample Description:			
pH (water)	**11**	**s.u.**	**#**			150.1	tg	4/12/99	*990658*	
Nova Sample Number: 14704										
Client ID: **990412WA05P**							Collection: 4/12/99		Time: 17:00	
							Sample Description:			
pH (water)	**7.8**	**s.u.**	**#**			150.1	tg	4/12/99	*990658*	
Nova Sample Number: 14705										
Client ID: **990412WA09P**							Collection: 4/12/99		Time: 17:10	
							Sample Description:			
Chromium, Hexavalent	**<0.0042**	**mg/l**		0.004	0.01	SM 3500D	80535	4/13/99	*990713*	
Cyanide, Amenable	**<0.018**	**mg/l**		0.018	0.06	335.2	van	4/20/99	*990706*	
Cyanide, Total	**<0.018**	**mg/l**		0.018	0.06	335.2	van	4/20/99	*990705*	

Approved By: _____ **Date:** 4/26/99

James Chang, Ph.D. , Lab Director

RJ *Result expressed as Total.*

TTR *Result expressed as total and total recoverable.*

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.
LOQ = 10 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

APL Environmental
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990258**
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 14700			QC Prep Batch Number:	990702			*Sample analyzed within*	*7 Day(s) from collection.*		
Client ID: 990412WA01P	Sample Description:						*Collection:*	*4/12/99*	*Time:*	*16:30*
1,1,1,2-Tetrachloroethane	< 4	ug/l	4	13	ns	20		8260	srh	4/19/99
1,1,1-Trichloroethane	368	ug/l	4.6	15	40	20		8260	srh	4/19/99
1,1,2,2-Tetrachloroethane	< 5.8	ug/l	5.8	18	0.02	20		8260	srh	4/19/99
1,1,2-Trichloroethane	< 5.8	ug/l	5.8	18	0.5	20		8260	srh	4/19/99
1,1-Dichloroethane	29	ug/l	3	9.5	85	20		8260	srh	4/19/99
1,1-Dichloroethene	22	ug/l	7.2	23	0.7	20	J	8260	srh	4/19/99
1,1-Dichloropropene	< 9.8	ug/l	9.8	31	ns	20		8260	srh	4/19/99
1,2,3-Trichlorobenzene	< 4.4	ug/l	4.4	14	ns	20		8260	srh	4/19/99
1,2,3-Trichloropropane	< 12	ug/l	12	38	ns	20		8260	srh	4/19/99
1,2,4-Trichlorobenzene	< 3.2	ug/l	3.2	10	14	20		8260	srh	4/19/99
1,2,4-Trimethylbenzene	< 5.8	ug/l	5.8	18	ns	20		8260	srh	4/19/99
1,2-Dibromoethane	< 4.8	ug/l	4.8	15	0.005	20		8260	srh	4/19/99
1,2-Dichlorobenzene	< 4	ug/l	4	13	60	20		8260	srh	4/19/99
1,2-Dichloroethane	< 3.8	ug/l	3.8	12	0.5	20		8260	srh	4/19/99
1,2-Dichloropropane	< 4.6	ug/l	4.6	15	0.5	20		8260	srh	4/19/99
1,3,5-Trimethylbenzene	< 4.6	ug/l	4.6	15	ns	20		8260	srh	4/19/99
1,3-Dichlorobenzene	< 3.8	ug/l	3.8	12	125	20		8260	srh	4/19/99
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	ns	20		8260	srh	4/19/99
1,4-Dichlorobenzene	< 3	ug/l	3	9.5	15	20		8260	srh	4/19/99
12Dibromo-3-chloropropan	< 12	ug/l	12	38	0.02	20		8260	srh	4/19/99
2,2-Dichloropropane	< 8	ug/l	8	25	ns	20		8260	srh	4/19/99
2-Butanone (MEK)	< 28	ug/l	28	88	90	20		8260	srh	4/19/99
2-Chloroethyl Vinyl Ether	< 5.8	ug/l	5.8	18	ns	20		8260	srh	4/19/99
2-Chlorotoluene	< 3	ug/l	3	9.5	ns	20		8260	srh	4/19/99
4-Chlorotoluene	< 5	ug/l	5	16	ns	20		8260	srh	4/19/99
4-Methyl-2-Pentanone	< 17	ug/l	17	53	50	20		8260	srh	4/19/99
Acetone	< 31	ug/l	31	99	200	20		8260	srh	4/19/99
Benzene	< 3.8	ug/l	3.8	12	0.5	20		8260	srh	4/19/99
Bromobenzene	< 3.8	ug/l	3.8	12	ns	20		8260	srh	4/19/99
Bromochloromethane	< 6.8	ug/l	6.8	22	ns	20		8260	srh	4/19/99
Bromodichloromethane	< 5.2	ug/l	5.2	17	0.06	20		8260	srh	4/19/99
Bromoform	< 9.4	ug/l	9.4	30	0.44	20		8260	srh	4/19/99
Bromomethane	< 4.2	ug/l	4.2	13	1	20		8260	srh	4/19/99
Carbon tetrachloride	< 4.4	ug/l	4.4	14	0.5	20		8260	srh	4/19/99
Chlorobenzene	< 4	ug/l	4	13	20	20		8260	srh	4/19/99
Chloroethane	< 23	ug/l	23	74	80	20		8260	srh	4/19/99
Chloroform	< 5.4	ug/l	5.4	17	0.6	20		8260	srh	4/19/99
Chloromethane	< 15	ug/l	15	49	0.3	20		8260	srh	4/19/99
cis-1,2-Dichloroethene	60	ug/l	4	13	7	20		8260	srh	4/19/99
cis-1,3-Dichloropropene	< 4.8	ug/l	4.8	15	0.02	20		8260	srh	4/19/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990258**
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<4.2	ug/l	4.2	13	6	20		8260	srh	4/19/99
Dibromomethane	<7	ug/l	7	22	ns	20		8260	srh	4/19/99
Dichlorodifluoromethane	<7.2	ug/l	7.2	23	200	20		8260	srh	4/19/99
Ethylbenzene	<3.2	ug/l	3.2	10	140	20		8260	srh	4/19/99
Hexachlorobutadiene	<4.4	ug/l	4.4	14	ns	20		8260	srh	4/19/99
Isopropyl Ether	<6.4	ug/l	6.4	20	ns	20		8260	srh	4/19/99
Isopropylbenzene	<3.2	ug/l	3.2	10	ns	20		8260	srh	4/19/99
m&p-xylene	<7.2	ug/l	7.2	23	124	20		8260	srh	4/19/99
Methyl-t-butyl ether	<4.2	ug/l	4.2	13	12	20		8260	srh	4/19/99
Methylene chloride	<15	ug/l	15	48	0.5	20		8260	srh	4/19/99
n-Butylbenzene	<4.6	ug/l	4.6	15	ns	20		8260	srh	4/19/99
n-Propylbenzene	<5	ug/l	5	16	ns	20		8260	srh	4/19/99
Naphthalene	<9.2	ug/l	9.2	29	8	20		8260	srh	4/19/99
o-xylene	<3.6	ug/l	3.6	11	124	20		8260	srh	4/19/99
p-Isopropyltoluene	<3.6	ug/l	3.6	11	ns	20		8260	srh	4/19/99
sec-Butylbenzene	<6	ug/l	6	19	ns	20		8260	srh	4/19/99
Styrene	<4.2	ug/l	4.2	13	10	20		8260	srh	4/19/99
tert-Butylbenzene	<4	ug/l	4	13	ns	20		8260	srh	4/19/99
Tetrachloroethene	11	ug/l	5.8	18	0.5	20	J	8260	srh	4/19/99
Toluene	<6.6	ug/l	6.6	21	68.6	20		8260	srh	4/19/99
trans-1,2-Dichloroethene	21	ug/l	3.2	10	20	20		8260	srh	4/19/99
trans-1,3-Dichloropropene	<4	ug/l	4	13	0.02	20		8260	srh	4/19/99
Trichloroethene	820	ug/l	3.2	10	0.5	20		8260	srh	4/19/99
Trichlorofluoromethane	<6.8	ug/l	6.8	22	ns	20		8260	srh	4/19/99
Vinyl chloride	<4.2	ug/l	4.2	13	0.02	20		8260	srh	4/19/99

Sample Number: **14705** QC Prep Batch Number: 990702 *Sample analyzed within 7 Day(s) from collection.*
Client ID: **990412WA09P** Sample Description: *Collection: 4/12/99 Time: 17:10*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
1,1,1-Trichloroethane	0.6	ug/l	0.2	0.7	40	1	J	8260	srh	4/19/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/19/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/19/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	4/19/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/19/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/19/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/19/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/19/99
1,2,4-Trimethylbenzene	0.8	ug/l	0.3	0.9	ns	1	J	8260	srh	4/19/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/19/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/19/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/19/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990258**
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/19/99
1,3,5-Trimethylbenzene	0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	4/19/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	4/19/99
12Dibromo-3-chloropropan	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/19/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/19/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	4/19/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/19/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/19/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/19/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	4/19/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	4/19/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/19/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/19/99
Bromodichloromethane	2	ug/l	0.3	0.8	0.06	1		8260	srh	4/19/99
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/19/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	4/19/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/19/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	4/19/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	4/19/99
Chloroform	4.3	ug/l	0.3	0.9	0.6	1		8260	srh	4/19/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/19/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	4/19/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/19/99
Dibromochloromethane	1.3	ug/l	0.2	0.7	6	1		8260	srh	4/19/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/19/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	4/19/99
Ethylbenzene	0.4	ug/l	0.2	0.5	140	1	J	8260	srh	4/19/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/19/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/19/99
m&p-xylene	1.2	ug/l	0.4	1.1	124	1		8260	srh	4/19/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	4/19/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/19/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/19/99
Naphthalene	0.5	ug/l	0.5	1.5	8	1	J	8260	srh	4/19/99
o-xylene	0.3	ug/l	0.2	0.6	124	1	J	8260	srh	4/19/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/19/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	4/19/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990258**
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/19/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	4/19/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	4/19/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/19/99
Trichloroethene	0.7	ug/l	0.2	0.5	0.5	1		8260	srh	4/19/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/19/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/19/99

Sample Number: **14706** QC Prep Batch Number: 990702 *Sample analyzed within 7 Day(s) from collection.*
Client ID: **trip blank** Sample Description: *Collection: 4/12/99 Time:*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
1,1,1-Trichloroethane	<0.2	ug/l	0.2	0.7	40	1		8260	srh	4/19/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/19/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/19/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	4/19/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/19/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/19/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/19/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/19/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/19/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/19/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/19/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/19/99
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/19/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	4/19/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	4/19/99
12Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/19/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/19/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	4/19/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/19/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/19/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/19/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	4/19/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	4/19/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/19/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/19/99
Bromodichloromethane	<0.3	ug/l	0.3	0.8	0.06	1		8260	srh	4/19/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990258**
DATE REPORTED: 19-Apr-99
DATE RECEIVED: 13-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 12th
PROJECT NAME: Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/19/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	4/19/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/19/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	4/19/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	4/19/99
Chloroform	< 0.3	ug/l	0.3	0.9	0.6	1		8260	srh	4/19/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/19/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	4/19/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/19/99
Dibromochloromethane	< 0.2	ug/l	0.2	0.7	6	1		8260	srh	4/19/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/19/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	4/19/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	4/19/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/19/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/19/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	4/19/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	4/19/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/19/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/19/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/19/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	4/19/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	4/19/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/19/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	4/19/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/19/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/19/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	4/19/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	4/19/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/19/99
Trichloroethene	< 0.2	ug/l	0.2	0.5	0.5	1		8260	srh	4/19/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/19/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/19/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER:	**990258**
DATE REPORTED:	19-Apr-99
DATE RECEIVED:	13-Apr-99
SAMPLE TEMP (C):	Rec On Ice
PROJECT ID:	April 12th
PROJECT NAME:	Weekly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal

Approved By: James Chang /sm **Date:** 4/23/99
James Chang, Ph.D. , Lab Director

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B *"e" = Estimate value, over calibration range .*
LOQ = 10 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
PAL: Preventive Action Limit, NR 140.10 Public health related groundwater standards. "ns" = not specified
RQ : Run Qualifier; "J" = Results between LOD and LOQ. "RR" = Re-extract Rerun sample, "B" = Showed in Blank sample.

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

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ORGANIC REPORT

WDNR# 241340550

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: **14764**			QC Prep Batch Number:		990755		*Sample analyzed within*	*3*	*Day(s) from collection.*	
Client ID: **990419WA01P**	Sample Description:						*Collection:*	*4/19/99*	*Time:*	*08:30*
1,1,1,2-Tetrachloroethane	< 4	ug/l	4	13	ns	20		8260	srh	4/22/99
1,1,1-Trichloroethane	317	ug/l	4.6	15	40	20		8260	srh	4/22/99
1,1,2,2-Tetrachloroethane	< 5.8	ug/l	5.8	18	0.02	20		8260	srh	4/22/99
1,1,2-Trichloroethane	< 5.8	ug/l	5.8	18	0.5	20		8260	srh	4/22/99
1,1-Dichloroethane	27	ug/l	3	9.5	85	20		8260	srh	4/22/99
1,1-Dichloroethene	19	ug/l	7.2	23	0.7	20	J	8260	srh	4/22/99
1,1-Dichloropropene	< 9.8	ug/l	9.8	31	ns	20		8260	srh	4/22/99
1,2,3-Trichlorobenzene	< 4.4	ug/l	4.4	14	ns	20		8260	srh	4/22/99
1,2,3-Trichloropropane	< 12	ug/l	12	38	ns	20		8260	srh	4/22/99
1,2,4-Trichlorobenzene	< 3.2	ug/l	3.2	10	14	20		8260	srh	4/22/99
1,2,4-Trimethylbenzene	< 5.8	ug/l	5.8	18	ns	20		8260	srh	4/22/99
1,2-Dibromoethane	< 4.8	ug/l	4.8	15	0.005	20		8260	srh	4/22/99
1,2-Dichlorobenzene	< 4	ug/l	4	13	60	20		8260	srh	4/22/99
1,2-Dichloroethane	< 3.8	ug/l	3.8	12	0.5	20		8260	srh	4/22/99
1,2-Dichloropropane	< 4.6	ug/l	4.6	15	0.5	20		8260	srh	4/22/99
1,3,5-Trimethylbenzene	< 4.6	ug/l	4.6	15	ns	20		8260	srh	4/22/99
1,3-Dichlorobenzene	< 3.8	ug/l	3.8	12	125	20		8260	srh	4/22/99
1,3-Dichloropropane	< 4.2	ug/l	4.2	13	ns	20		8260	srh	4/22/99
1,4-Dichlorobenzene	< 3	ug/l	3	9.5	15	20		8260	srh	4/22/99
12Dibromo-3-chloropropan	< 12	ug/l	12	38	0.02	20		8260	srh	4/22/99
2,2-Dichloropropane	< 8	ug/l	8	25	ns	20		8260	srh	4/22/99
2-Butanone (MEK)	< 28	ug/l	28	88	90	20		8260	srh	4/22/99
2-Chloroethyl Vinyl Ether	< 5.8	ug/l	5.8	18	ns	20		8260	srh	4/22/99
2-Chlorotoluene	< 3	ug/l	3	9.5	ns	20		8260	srh	4/22/99
4-Chlorotoluene	< 5	ug/l	5	16	ns	20		8260	srh	4/22/99
4-Methyl-2-Pentanone	< 17	ug/l	17	53	50	20		8260	srh	4/22/99
Acetone	< 31	ug/l	31	99	200	20		8260	srh	4/22/99
Benzene	< 3.8	ug/l	3.8	12	0.5	20		8260	srh	4/22/99
Bromobenzene	< 3.8	ug/l	3.8	12	ns	20		8260	srh	4/22/99
Bromochloromethane	< 6.8	ug/l	6.8	22	ns	20		8260	srh	4/22/99
Bromodichloromethane	< 5.2	ug/l	5.2	17	0.06	20		8260	srh	4/22/99
Bromoform	< 9.4	ug/l	9.4	30	0.44	20		8260	srh	4/22/99
Bromomethane	< 4.2	ug/l	4.2	13	1	20		8260	srh	4/22/99
Carbon tetrachloride	< 4.4	ug/l	4.4	14	0.5	20		8260	srh	4/22/99
Chlorobenzene	< 4	ug/l	4	13	20	20		8260	srh	4/22/99
Chloroethane	< 23	ug/l	23	74	80	20		8260	srh	4/22/99
Chloroform	< 5.4	ug/l	5.4	17	0.6	20		8260	srh	4/22/99
Chloromethane	< 15	ug/l	15	49	0.3	20		8260	srh	4/22/99
cis-1,2-Dichloroethene	57	ug/l	4	13	7	20		8260	srh	4/22/99
cis-1,3-Dichloropropene	< 4.8	ug/l	4.8	15	0.02	20		8260	srh	4/22/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<4.2	ug/l	4.2	13	6	20		8260	srh	4/22/99
Dibromomethane	<7	ug/l	7	22	ns	20		8260	srh	4/22/99
Dichlorodifluoromethane	<7.2	ug/l	7.2	23	200	20		8260	srh	4/22/99
Ethylbenzene	<3.2	ug/l	3.2	10	140	20		8260	srh	4/22/99
Hexachlorobutadiene	<4.4	ug/l	4.4	14	ns	20		8260	srh	4/22/99
Isopropyl Ether	<6.4	ug/l	6.4	20	ns	20		8260	srh	4/22/99
Isopropylbenzene	<3.2	ug/l	3.2	10	ns	20		8260	srh	4/22/99
m&p-xylene	<7.2	ug/l	7.2	23	124	20		8260	srh	4/22/99
Methyl-t-butyl ether	<4.2	ug/l	4.2	13	12	20		8260	srh	4/22/99
Methylene chloride	<15	ug/l	15	48	0.5	20		8260	srh	4/22/99
n-Butylbenzene	<4.6	ug/l	4.6	15	ns	20		8260	srh	4/22/99
n-Propylbenzene	<5	ug/l	5	16	ns	20		8260	srh	4/22/99
Naphthalene	<9.2	ug/l	9.2	29	8	20		8260	srh	4/22/99
o-xylene	<3.6	ug/l	3.6	11	124	20		8260	srh	4/22/99
p-Isopropyltoluene	<3.6	ug/l	3.6	11	ns	20		8260	srh	4/22/99
sec-Butylbenzene	<6	ug/l	6	19	ns	20		8260	srh	4/22/99
Styrene	<4.2	ug/l	4.2	13	10	20		8260	srh	4/22/99
tert-Butylbenzene	<4	ug/l	4	13	ns	20		8260	srh	4/22/99
Tetrachloroethene	10	ug/l	5.8	18	0.5	20	J	8260	srh	4/22/99
Toluene	<6.6	ug/l	6.6	21	68.6	20		8260	srh	4/22/99
trans-1,2-Dichloroethene	19	ug/l	3.2	10	20	20		8260	srh	4/22/99
trans-1,3-Dichloropropene	<4	ug/l	4	13	0.02	20		8260	srh	4/22/99
Trichloroethene	800	ug/l	3.2	10	0.5	20		8260	srh	4/22/99
Trichlorofluoromethane	<6.8	ug/l	6.8	22	ns	20		8260	srh	4/22/99
Vinyl chloride	<4.2	ug/l	4.2	13	0.02	20		8260	srh	4/22/99

Sample Number: **14769** QC Prep Batch Number: 990755 *Sample analyzed within 3 Day(s) from collection.*
Client ID: **990419WA07P** Sample Description: *Collection: 4/19/99 Time: 10:33*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
1,1,1-Trichloroethane	0.5	ug/l	0.2	0.7	40	1	J	8260	srh	4/22/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/22/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/22/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	4/22/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/22/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/22/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/22/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/22/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/22/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/22/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
1,3,5-Trimethylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	4/22/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	4/22/99
12Dibromo-3-chloropropan	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/22/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/22/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	4/22/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	4/22/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	4/22/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Bromodichloromethane	1	ug/l	0.3	0.8	0.06	1		8260	srh	4/22/99
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/22/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	4/22/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	4/22/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	4/22/99
Chloroform	6.5	ug/l	0.3	0.9	0.6	1		8260	srh	4/22/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/22/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	4/22/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/22/99
Dibromochloromethane	0.7	ug/l	0.2	0.7	6	1	J	8260	srh	4/22/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/22/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	4/22/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	4/22/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	4/22/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	4/22/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/22/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	4/22/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	4/22/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	4/22/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/22/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	4/22/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	4/22/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/22/99
Trichloroethene	2	ug/l	0.2	0.5	0.5	1		8260	srh	4/22/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/22/99

Sample Number: **14770** QC Prep Batch Number: 990755 *Sample analyzed within 3 Day(s) from collection.*
Client ID: **990419WA09P** Sample Description: *Collection: 4/19/99 Time: 10:50*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
1,1,1-Trichloroethane	0.7	ug/l	0.2	0.7	40	1	J	8260	srh	4/22/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	4/22/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/22/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	4/22/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/22/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/22/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/22/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	4/22/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/22/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	4/22/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	4/22/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	4/22/99
12Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/22/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/22/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	4/22/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	4/22/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	4/22/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Bromodichloromethane	2	ug/l	0.3	0.8	0.06	1		8260	srh	4/22/99

APL Environmental
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	<0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/22/99
Bromomethane	<0.2	ug/l	0.2	0.7	1	1		8260	srh	4/22/99
Carbon tetrachloride	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
Chlorobenzene	<0.2	ug/l	0.2	0.6	20	1		8260	srh	4/22/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	srh	4/22/99
Chloroform	4	ug/l	0.3	0.9	0.6	1		8260	srh	4/22/99
Chloromethane	<0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/22/99
cis-1,2-Dichloroethene	0.3	ug/l	0.2	0.6	7	1	J	8260	srh	4/22/99
cis-1,3-Dichloropropene	<0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/22/99
Dibromochloromethane	1.4	ug/l	0.2	0.7	6	1		8260	srh	4/22/99
Dibromomethane	<0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/22/99
Dichlorodifluoromethane	<0.4	ug/l	0.4	1.1	200	1		8260	srh	4/22/99
Ethylbenzene	<0.2	ug/l	0.2	0.5	140	1		8260	srh	4/22/99
Hexachlorobutadiene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
Isopropyl Ether	<0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Isopropylbenzene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
m&p-xylene	<0.4	ug/l	0.4	1.1	124	1		8260	srh	4/22/99
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	4/22/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/22/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	4/22/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	4/22/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	4/22/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/22/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	4/22/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	4/22/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/22/99
Trichloroethene	1.1	ug/l	0.2	0.5	0.5	1		8260	srh	4/22/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/22/99

Sample Number: **14771** QC Prep Batch Number: 990755 *Sample analyzed within 3 Day(s) from collection.*
Client ID: **trip blank** Sample Description: *Collection: 4/19/99 Time:*

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1	8260	srh	4/22/99
1,1,1-Trichloroethane	<0.2	ug/l	0.2	0.7	40	1	8260	srh	4/22/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1	8260	srh	4/22/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1	8260	srh	4/22/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1	8260	srh	4/22/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990276
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.1	0.7	1		8260	srh	4/22/99
1,1-Dichloropropene	< 0.5	ug/l	0.5	1.6	ns	1		8260	srh	4/22/99
1,2,3-Trichlorobenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	srh	4/22/99
1,2,4-Trichlorobenzene	< 0.2	ug/l	0.2	0.5	14	1		8260	srh	4/22/99
1,2,4-Trimethylbenzene	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
1,2-Dibromoethane	< 0.2	ug/l	0.2	0.8	0.005	1		8260	srh	4/22/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	60	1		8260	srh	4/22/99
1,2-Dichloroethane	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
1,3,5-Trimethylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	4/22/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	4/22/99
12Dibromo-3-chloropropan	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	4/22/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	4/22/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	4/22/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	4/22/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	4/22/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	4/22/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	4/22/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Bromodichloromethane	< 0.3	ug/l	0.3	0.8	0.06	1		8260	srh	4/22/99
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	4/22/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	4/22/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	4/22/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	4/22/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	4/22/99
Chloroform	< 0.3	ug/l	0.3	0.9	0.6	1		8260	srh	4/22/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	4/22/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	4/22/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	4/22/99
Dibromochloromethane	< 0.2	ug/l	0.2	0.7	6	1		8260	srh	4/22/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	4/22/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	4/22/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	4/22/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	4/22/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	4/22/99

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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: **990276**
DATE REPORTED: 26-Apr-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	4/22/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	4/22/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	4/22/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	4/22/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	4/22/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	4/22/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	4/22/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	4/22/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	4/22/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	4/22/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	4/22/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	4/22/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	4/22/99
Trichloroethene	< 0.2	ug/l	0.2	0.5	0.5	1		8260	srh	4/22/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	4/22/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	4/22/99

Approved By: James C Chang Ph.D. **Date:** 4/26/99
James Chang, Ph.D. , Lab Director

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B *"e" = Estimate value, over calibration range .*
LOQ = 10 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Factor, where "S" is the Standard Deviation from the MDL Study
PAL: Preventive Action Limit, NR 140.10 Public health related groundwater standards. "ns" = not specified
RQ : Run Qualifier; "J" = Results between LOD and LOQ. "RR" = Re-extract Rerun sample, "B" = Showed in Blank sample.

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.

APL INC.

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990276
DATE REPORTED: 07-May-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Nova Sample Number: 14764
Client ID: **990419WA01P**
Collection: 4/19/99 Time: 08:30
Sample Description:

Test	Result	Units		RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Arsenic - Furnace AA	<9.9	ug/l		RJ	9.9	31	206.2	dmd	4/23/99	990733	
Barium - ICAP	0.1	mg/l		RJ	0.003	0.010	200.7	dmd	4/20/99	990712	
Cadmium - Furnace AA	<0.7	ug/l		TTR	0.7	2.2	213.2	dmd	4/23/99	990731	
Chromium, Total - ICAP	<0.01	mg/l		RJ	0.01	0.03	200.7	dmd	4/20/99	990712	
Copper- ICAP	<0.008	mg/l		RJ	0.008	0.03	200.7	dmd	4/20/99	990712	
Iron - ICAP	0.87	mg/l		RJ	0.071	0.23	200.7	dmd	4/20/99	990712	
Lead - Furnace AA	<1.1	ug/l		RJ	1.1	3.5	239.2	dmd	4/23/99	990732	
Manganese - ICAP	0.16	mg/l		RJ	0.009	0.03	200.7	dmd	4/20/99	990712	
Mercury CV	<0.0002	mg/l		RJ	0.0002	0.0006	245.1	dmd	4/23/99	990747	
Nickel - ICAP	45	ug/l		RJ	11	35	200.7	dmd	4/20/99	990712	
Selenium - Furnace AA	<7.8	ug/l		RJ	7.8	25	270.2	dmd	4/23/99	990734	
Silver - ICAP	<0.006	mg/l		RJ	0.006	0.02	200.7	dmd	4/20/99	990712	
Thallium - Furnace AA	<5.0	ug/l		RJ	5	16	279.2	dmd	4/20/99	990711	
Zinc - ICAP	<0.021	mg/l		RJ	0.021	0.07	200.7	dmd	4/20/99	990712	
Chromium, Hexavalent	<0.0042	mg/l			0.004	0.01	SM 3500D	12805	4/19/99	990772	
COD. Total	<3.4	mg/l			3.4	11	410.4-CT	van	4/28/99	990779	
Cyanide, Amenable	<0.018	mg/l			0.018	0.06	335.2	van	4/23/99	990740	
Cyanide, Total	<0.018	mg/l			0.018	0.06	335.2	van	4/23/99	990739	
pH (water)	7.1	s.u.	#				150.1		4/21/99	990717	Oconomowoc
Solids, Total Suspended	1	mg/l	J		0.5	1.6	SM 2540D	rf	4/23/99	990789	

Nova Sample Number: 14765
Client ID: **990419WA09R**
Collection: 4/19/99 Time: 15:30
Sample Description:

Test	Result	Units		RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Arsenic - Furnace AA	<9.9	ug/l		RJ	9.9	31	206.2	dmd	4/23/99	990733	
Barium - ICAP	0.04	mg/l		RJ	0.003	0.010	200.7	dmd	4/20/99	990712	
Cadmium - Furnace AA	<0.7	ug/l		TTR	0.7	2.2	213.2	dmd	4/23/99	990731	
Chromium, Total - ICAP	<0.01	mg/l		RJ	0.01	0.03	200.7	dmd	4/20/99	990712	
Copper- ICAP	<0.008	mg/l		RJ	0.008	0.03	200.7	dmd	4/20/99	990712	
Iron - ICAP	0.11	mg/l	J	RJ	0.071	0.23	200.7	dmd	4/20/99	990712	
Lead - Furnace AA	<1.1	ug/l		RJ	1.1	3.5	239.2	dmd	4/23/99	990732	
Manganese - ICAP	<0.009	mg/l		RJ	0.009	0.03	200.7	dmd	4/20/99	990712	
Mercury CV	<0.0002	mg/l		RJ	0.0002	0.0006	245.1	dmd	4/23/99	990747	

APL INC.

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990276
DATE REPORTED: 07-May-99
DATE RECEIVED: 20-Apr-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID: April 19th
PROJECT NAME: Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nickel - ICAP	**<11**	**ug/l**	**RJ**	11	35	200.7	dmd	4/20/99	*990712*	
Selenium - Furnace AA	**<7.8**	**ug/l**	**RJ**	7.8	25	270.2	dmd	4/23/99	*990734*	
Silver - ICAP	**<0.006**	**mg/l**	**RJ**	0.006	0.02	200.7	dmd	4/20/99	*990712*	
Thallium - Furnace AA	**<5.0**	**ug/l**	**RJ**	5	16	279.2	dmd	4/20/99	*990711*	
Zinc - ICAP	**0.02**	**mg/l**	***J*** **RJ**	0.021	0.07	200.7	dmd	4/20/99	*990712*	
COD. Total	**10**	**mg/l**	***J***	3.4	11	410.4-CT	van	4/28/99	*990779*	
Nitrate + Nitrite Nitrogen	**0.93**	**mg/l**		0.04	0.13	353.3	dmd	5/4/99	*990819*	
Nitrogen, Ammonia	**<0.1**	**mg/l**		0.1	0.32	350.1	12805	4/22/99	*990773*	
Phosphorus, Total	**0.05**	**mg/l**	***J***	0.033	0.10	365.2	van	4/30/99	*990804*	
Solids, Total Suspended	**<0.5**	**mg/l**		0.5	1.6	SM 2540D	rf	4/23/99	*990789*	

Nova Sample Number: 14766
Client ID: **990419WA02P**
Collection: 4/19/99 Time: 09:15
Sample Description:

pH (water)	**10**	**s.u.**	**#**			150.1		4/21/99	*990717*	*Oconomowoc*

Nova Sample Number: 14767
Client ID: **990419WA03P**
Collection: 4/19/99 Time: 09:16
Sample Description:

pH (water)	**11**	**s.u.**	**#**			150.1		4/21/99	*990717*	*Oconomowoc*

Nova Sample Number: 14768
Client ID: **990419WA05P**
Collection: 4/19/99 Time: 10:30
Sample Description:

pH (water)	**7.6**	**s.u.**	**#**			150.1		4/21/99	*990717*	*Oconomowoc*

Nova Sample Number: 14770
Client ID: **990419WA09P**
Collection: 4/19/99 Time: 10:50
Sample Description:

Chromium, Hexavalent	**<0.0042**	**mg/l**		0.004	0.01	SM 3500D	12805	4/19/99	*990772*	
Cyanide, Amenable	**<0.018**	**mg/l**		0.018	0.06	335.2	van	4/23/99	*990740*	
Cyanide, Total	**<0.018**	**mg/l**		0.018	0.06	335.2	van	4/23/99	*990739*	
pH (water)	**8.1**	**s.u.**	**#**			150.1		4/21/99	*990717*	*Oconomowoc*

APL INC.

INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER	**990276**
DATE REPORTED:	07-May-99
DATE RECEIVED:	20-Apr-99
SAMPLE TEMP (C):	Rec On Ice
PROJECT ID:	April 19th
PROJECT NAME:	Monthly Sampling

James Chang
Oconomowoc Groundwater Treatment Plant
2572 Oak St.
Ashippun , WI 53003

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments

Approved By: _____ **Date:** 5/7/99

James Chang, Ph.D. , Lab Director

RJ *Result expressed as Total.*

TTR *Result expressed as total and total recoverable.*

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.
LOQ = 10 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study
LOD = 3.143 (S) x Dilution Facor, where "S" is the Standard Deviation from the MDL Study

Rounding Rules: Three significant figures were used for concentrations above 99 ug/L, two significant figures for concentrations between 1-99 ug/L, and one significant figure for lower concentrations.
DNR Analytical Detection Limit Guidance, April 1995.