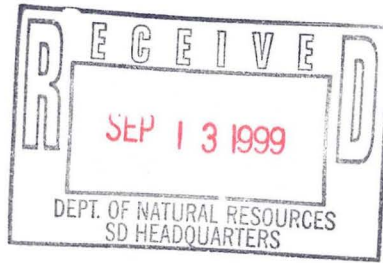




September 15, 1999

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 August, 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, Plant Superintendent  
APL, Inc.

cc: Steven Brossart, USACE, St. Paul District  
Steve Padovani, USEPA  
James Chang, APL, Inc.  
David Brodzinski, WDNR, Horicon

**MONTHLY MONITORING REPORT  
FOR THE  
OCONOMOWOC ELECTROPLATING  
GROUNDWATER TREATMENT FACILITY**

**ASHIPPUN, WISCONSIN 53003**

**Prepared for:**

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

**Prepared by:**

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

**September 15, 1999**

## **1.0 Introduction**

This report summarizes the monthly effluent monitoring results for the Oconomowoc Electroplating Groundwater Treatment Plant (OEGTP) for August, 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 Steven Brossart of the U.S. Army Corps of Engineers (USACE). Mr. Brossart's phone number is (507) 454-6150, Fax (507) 454-4963. 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.

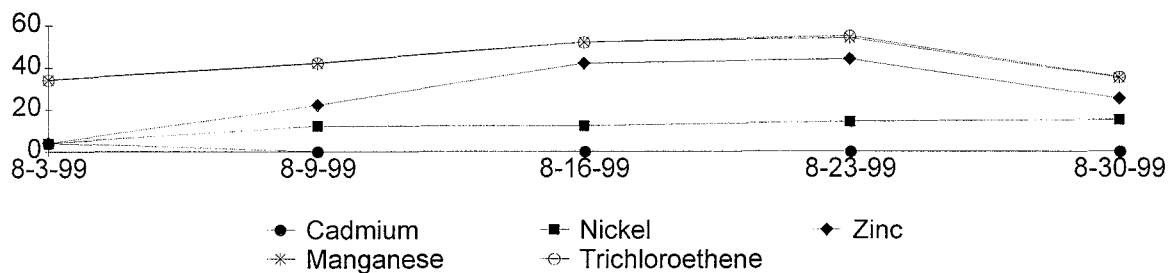
## 1.3 Effluent Monitoring

Weekly monitoring was conducted on August 3, 9, 16, 23, and 30. The weekly samples for August were tested by APL, Inc. The results of the effluent monitoring tests for the samples taken on August showed exceedences of the WDNR effluent discharge permit for Total Cadmium on the August 3 sampling and TCE on August 23. The possible cause of the high levels of Total Cadmium and TCE 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)*.

**Chart 1 - 5 Important Indicator Parameters**



## 2.0 Plant Permit Exceedences

The high level of Total Cadmium on the August 3 sampling may be due to the activation of the idle Extraction Well (EW-2). EW-2 has had a very low flow since January 1999. On July 27, EW-2 was reactivated after several problems with trying to keep the new pump running. It was replaced with the cleaned pump that it was supposed to be replacing. It had a faulty power pack and was returned to the supplier. The cleaned pump has been in constant operation. The August 3 sampling was the first since EW-2 was put back into constant operation. The treatment plant's limit for Total Cadmium is 0.5 ug/l and the August 3 sampling result was 4.0 ug/l. The sampling conducted on August 9 showed no Total Cadmium detected.

The high level of TCE may be due to the life span of the Activated Carbon being close to its change out time. Paul Kozol, of the WDNR, authorized continued plant operations until the TCE level is equal to or > 1.5 ug/l. The treatment plant's limit for TCE is 0.5 ug/l and the August 23 sampling result was 0.94 ug/l.

## 3.0 Treatment Plant Shut Downs

The Treatment Plant was shut down three times for a total of 65.5 hours in August, 1999. The shut downs were due to the Motor Operated Valve Left Closed, Acid Cleaning of EW Piping, and Scheduled Maintenance. Table 1 shows the summary of the plant down times for the month of August, 1999.

**Table 1 - Plant Down Time Summary**

<b>Date(s)</b>	<b>Number Hours Shut Down</b>	<b>Reason</b>
8/1-2	11	MOV-711 Left Closed
8/12-13	9	Acid Cleaned EW Piping
8/24-26	45.5	Scheduled Maintenance Shut Down
<b>TOTAL</b>	<b>65.5</b>	

### **3.1 Shut Down Due To MOV-711 Left Closed**

The Sunday operator, on August 1, forgot to put the MOV-711 switch back in the Auto mode after performing an effluent backwash on the Tertiary Filter (TF-600). The treatment plant shut down at 6:30 P.M. and was not discovered until the operator arrived for work on August 2. The operator put the MOV-711 switch back in the Auto mode and activated the Effluent Transfer Pump (ETP-710) to speed up the emptying of the Effluent Holding Tank (EHT-700). At 6:00 A.M., the treatment plant restarted after the EHT-700 reached <75%. APL, WDNR, and USACE were notified. The total down time was 11.5 hours.

### **3.2 Shut Down Due Extraction Wells' Piping Acid Cleaned**

On August 12, the Extraction Well field was shut down at 9 A.M., to allow for acid cleaning of the piping to the Equalization Tank (EQT-100). The treatment plant flow was slowed down and water was added to the floor trench to reduce the amount of treatment plant down time. A dilute inhibited muriatic acid solution was pumped into the EW piping to react with the iron bacteria and hardness that was observed coating the piping during the EW pump change outs. The dilute inhibited muriatic acid solution was left in the piping over night. At 10 P.M., the treatment plant shut down automatically due to the level in the EQT-100 lowering <55%. On August 13, at 5:45 A.M., the Extraction Well field was restarted and the treatment plant restarted automatically after the level in the EQT-100 raised >55% at 7 A.M. The total flow to EQT-100 increased from 22.6 gpm to 26 gpm after the pumps were restarted. APL, WDNR, and USACE were notified. The total down time was 9 hours.

### **3.3 Shut Down Due To Scheduled Maintenance**

On August 24, the treatment plant was shut down at 11:30 A.M. to perform scheduled maintenance. Equipment worked on and work performed included rewelding the Diffused Air Stripper (DAS-500) blower duct, replacing corroded metal piping from the DAS-500 to the Effluent Holding Tank (EHT-700), acid cleaning the Tertiary Filtration System (TF-600), auguring out the discharge line from the Cyanide Reaction Tank (CRT-211) to the Rapid Mix Tank (RMT-301), rebuilding the Acid Injection Quill, and replacing leaking fittings for Sodium Hypochlorite Pump (SCP-252). Work that is still pending and will need to rescheduled for a later time is replacing piping from EHT-700 to the NDPES Monitoring Station, replacing the motor operated valve (MOV-523) located between DAS-500 and the Granulated Activated Carbon Filters (GAC-650/651), replacing the Thickener Drive (TD-401) seal on the Clarifier

(C-400), and changing out the spent Carbon from GAC-650/651. The treatment plant was restarted at 9 A.M. on August 26. APL, WDNR, and USACE were notified. The total down time was 45.5 hours.

#### **4.0 Summary**

Groundwater Treatment Plant effluent monitoring was conducted on August 3, 9, 16, 23, and 30 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 and Total Cadmium. See Chart 1, Section 1.4 for *Important Indicator Parameters*.

During the month of August, 1999, the plant was shut down three times for a total of 65.5 hours. See Table 1, Section 3.0 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 September 15, 1999.

**OCONOMOWOC GROUNDWATER TREATMENT PLANT**

Weekly Sampling Results

Date: 8-3-99

Parameter	Influent	After FT-311	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.4	11	N/A	N/A	NT	Monitor
TSS	ND	NT	NT	NT	ND	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	140	NT	NT	NT	40	400
Cadmium	1.2	NT	NT	NT	4	0.5
Cadmium Total Recoverable	1.1	NT	NT	NT	3.5	Monitor
Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	10	NT	NT	NT	ND	Monitor
Iron	1200	NT	NT	NT	ND	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	190	NT	NT	NT	30	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	60	NT	NT	NT	ND	20
Selenium	35	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	24	NT	ND	NT	ND	85
1,2-Dichloroethane	ND	NT	ND	NT	ND	0.5
1,1-Dichloroethene	14	NT	ND	NT	ND	0.7
1,2-Dichloroethene Cis	53	NT	0.23	NT	ND	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	8.9	NT	ND	NT	ND	0.5
Toluene	ND	NT	ND	NT	ND	68
1,1,1-Trichloroethane	235	NT	0.28	NT	ND	40
1,1,2-Trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	612	NT	1.2	NT	0.25	0.5
Vinyl Chloride	ND	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	ND	124
COD	2.7	NT	NT	NT	ND	Monitor
Phosphorus total	NT	NT	NT	NT	ND	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	0.14	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	ND	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l



**OCONOMOWOC GROUNDWATER TREATMENT PLANT**

Weekly Sampling Results

Date: 8-9-99

Parameter	Influent	After FT-311	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.1	11	N/A	N/A	NT	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	120	NT	NT	NT	20	400
Cadmium	ND	NT	NT	NT	ND	0.5
Cadmium Total	ND	NT	NT	NT	ND	Monitor
Recoverable Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	20	NT	NT	NT	10	Monitor
Iron	1300	NT	NT	NT	200	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	140	NT	NT	NT	20	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	40	NT	NT	NT	12	20
Selenium	ND	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	10	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-Dichloroethane	26	NT	ND	NT	ND	85
1,2-Dichloroethane	ND	NT	ND	NT	ND	0.5
1,1-Dichloroethene	16	NT	ND	NT	ND	0.7
1,2-Dichloroethene Cis	58	NT	ND	NT	ND	7
1,2-Dichloroethene Trans	21	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	280	NT	ND	NT	ND	40
1,1,2-Trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	697	NT	0.26	NT	0.32	0.5
Vinyl Chloride	ND	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	ND	124
COD	NT	NT	NT	NT	NT	Monitor
Phosphorus total	NT	NT	NT	NT	NT	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l

**OCONOMOWOC GROUNDWATER TREATMENT PLANT**

Weekly Sampling Results

Date: 8-16-99

Parameter	Influent	After FT-311	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7	11	N/A	N/A	NT	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	110	NT	NT	NT	30	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	20	NT	NT	NT	40	Monitor
Iron	1400	NT	NT	NT	270	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	130	NT	NT	NT	10	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	19	NT	NT	NT	12	20
Selenium	15	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	30	NT	NT	NT	60	Monitor
Cyanide	9	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-Dichloroethane	32	NT	ND	NT	ND	85
1,2-Dichloroethane	ND	NT	ND	NT	ND	0.5
1,1-Dichloroethene	23	NT	ND	NT	ND	0.7
1,2-Dichloroethene Cis	65	NT	ND	NT	ND	7
1,2-Dichloroethene Trans	20	NT	ND	NT	ND	20
Ethylbenzene	ND	NT	ND	NT	ND	140
Methylene Chloride	ND	NT	ND	NT	ND	0.5
Tetrachloroethene	6.8	NT	ND	NT	ND	0.5
Toluene	ND	NT	ND	NT	ND	68
1,1,1-Trichloroethane	350	NT	ND	NT	ND	40
1,1,2-Trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	780	NT	0.2	NT	ND	0.5
Vinyl Chloride	2.4	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	ND	124
COD	NT	NT	NT	NT	NT	Monitor
Phosphorus total	NT	NT	NT	NT	NT	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l

**OCONOMOWOC GROUNDWATER TREATMENT PLANT**

Weekly Sampling Results

Date: 8-23-99

Parameter	Influent	After FT-311	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.3	12	N/A	N/A	NT	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	100	NT	NT	NT	20	400
Cadmium	ND	NT	NT	NT	ND	0.5
Cadmium Total	ND	NT	NT	NT	ND	Monitor
Recoverable Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	ND	NT	NT	NT	ND	Monitor
Iron	1100	NT	NT	NT	130	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	130	NT	NT	NT	10	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	20	NT	NT	NT	14	20
Selenium	14	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	10	NT	NT	NT	30	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-Dichloroethane	31	NT	0.24	NT	ND	85
1,2-Dichloroethane	2.1	NT	ND	NT	ND	0.5
1,1-Dichloroethene	15	NT	ND	NT	ND	0.7
1,2-Dichloroethene Cis	64	NT	0.47	NT	ND	7
1,2-Dichloroethene Trans	20	NT	ND	NT	ND	20
Ethylbenzene	ND	NT	ND	NT	ND	140
Methylene Chloride	ND	NT	ND	NT	ND	0.5
Tetrachloroethene	9.4	NT	ND	NT	ND	0.5
Toluene	ND	NT	ND	NT	ND	68
1,1,1-Trichloroethane	244	NT	0.56	NT	0.25	40
1,1,2-Trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	662	NT	2.5	NT	0.94	0.5
Vinyl Chloride	3.8	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	ND	124
COD	NT	NT	NT	NT	NT	Monitor
Phosphorus total	NT	NT	NT	NT	NT	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l

**OCONOMOWOC GROUNDWATER TREATMENT PLANT**

Weekly Sampling Results

Date: 8-30-99

Parameter	Influent	After FT-311	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.1	11	N/A	N/A	8.1	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	110	NT	NT	NT	20	400
Cadmium	ND	NT	NT	NT	ND	0.5
Cadmium Total	ND	NT	NT	NT	ND	Monitor
Recoverable						
Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	ND	NT	NT	NT	ND	Monitor
Iron	900	NT	NT	NT	140	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	180	NT	NT	NT	10	Monitor
Mercury	0.3	NT	NT	NT	ND	0.2
Nickel	40	NT	NT	NT	15	20
Selenium	18	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	10	NT	NT	NT	10	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-Dichloroethane	36	NT	0.26	NT	ND	85
1,2-Dichloroethane	ND	NT	ND	NT	ND	0.5
1,1-Dichloroethene	18	NT	ND	NT	ND	0.7
1,2-Dichloroethene Cis	64	NT	0.45	NT	ND	7
1,2-Dichloroethene Trans	21	NT	ND	NT	ND	20
Ethylbenzene	ND	NT	ND	NT	ND	140
Methylene Chloride	ND	NT	ND	NT	ND	0.5
Tetrachloroethene	22	NT	ND	NT	ND	0.5
Toluene	ND	NT	ND	NT	0.79	68
1,1,1-Trichloroethane	298	NT	0.48	NT	ND	40
1,1,2-Trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	704	NT	2.2	NT	0.45	0.5
Vinyl Chloride	4.5	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	0.42	124
COD	NT	NT	NT	NT	NT	Monitor
Phosphorus total	NT	NT	NT	NT	NT	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	NT	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	NT	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l

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
May 10, 1999	5.50	6.35	3.35	3.40	7.05	COVERED
June 18, 1999	4.95	6.05	3.00	3.22	6.81	COVERED
July 13, 1999	6.30	DRY	3.80	4.05	7.90	COVERED
August 06, 1999	6.37	DRY	3.58	4.00	7.65	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
May 10, 1999	3.85	3.05	4.95	2.80	9.45	3.80
June 18, 1999	3.71	3.75	4.87	2.49	9.29	2.81
July 13-14, 1999	4.50	3.65	5.74	3.82	10.19	3.05
August 06, 1999	4.62	3.59	5.48	3.26	10.17	3.32

FLOW FROM EXTRACTION WELLS

YEAR: 1999				
MONTH: AUGUST	FE-100 FLOW	TOTAL DAY'S	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)	MGD	
1	214,291.20	9,430.70	0.009	SHUT DOWN WK. AVE. RESET
2	223,721.90	(220,367.28)	0.024	
3	3,354.62	26,617.78	0.027	
4	29,972.40	23,966.85	0.024	
5	53,939.25	33,835.40	0.034	
6	87,774.65	26,814.35	0.027	
7	114,589.00	30,503.20	0.031	
8	145,092.20	32,480.30	0.032	
9	177,572.50	26,869.90	0.027	
10	204,442.40	28,985.00	0.029	
11	233,427.40	22,501.30	0.023	
12	255,928.70	9,248.60	0.009	SHUT DOWN SHUT DOWN
13	265,177.30	21,481.50	0.021	
14	286,658.80	37,385.50	0.037	
15	324,044.30	38,034.60	0.038	
16	362,078.90	32,089.90	0.032	
17	394,168.80	32,932.80	0.033	
18	427,101.60	33,024.90	0.033	
19	460,126.50	31,123.90	0.031	
20	491,250.40	31,699.30	0.032	
21	522,949.70	32,858.10	0.033	
22	555,807.80	23,246.80	0.023	
23	579,054.60	13,993.80	0.014	SHUT DOWN SHUT DOWN SHUT DOWN
24	593,048.40	6,700.90	0.007	
25	599,749.30	4,793.60	0.005	
26	604,542.90	36,280.30	0.036	
27	640,823.20	23,136.40	0.023	
28	663,959.60	30,192.70	0.030	
29	694,152.30	44,941.10	0.045	
30	739,093.40	26,321.40	0.026	
31	765,414.80	38,058.30	0.038	
September 01	803,473.10			
<b>TOTAL</b>			0.833	
<b>AVERAGE</b>			0.027	

FLOW FROM EQT-100

YEAR: 1999				
MONTH: AUGUST	FE-112 FLOW	TOTAL DAY'S	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)	MGD	
1	1,684,936.00	18,030.00	0.018	SHUT DOWN
2	1,702,966.00	32,118.00	0.032	
3	1,735,084.00	37,773.00	0.038	
4	1,772,857.00	29,010.00	0.029	
5	1,801,867.00	41,568.00	0.042	
6	1,843,435.00	32,694.00	0.033	
7	1,876,129.00	37,445.00	0.037	
8	1,913,574.00	50,738.00	0.051	
9	1,964,312.00	28,233.00	0.028	
10	1,992,545.00	43,066.00	0.043	
11	2,035,611.00	29,028.00	0.029	
12	2,064,639.00	26,869.00	0.027	SHUT DOWN
13	2,091,508.00	27,696.00	0.028	
14	2,119,204.00	43,283.00	0.043	
15	2,162,487.00	44,286.00	0.044	
16	2,206,773.00	28,516.00	0.029	
17	2,235,289.00	44,985.00	0.045	
18	2,280,274.00	38,425.00	0.038	
19	2,318,699.00	38,200.00	0.038	
20	2,356,899.00	37,259.00	0.037	
21	2,394,158.00	39,514.00	0.040	
22	2,433,672.00	44,704.00	0.045	
23	2,478,376.00	38,180.00	0.038	
24	2,516,556.00	1,593.00	0.002	SHUT DOWN
25	2,518,149.00	7,079.00	0.007	
26	2,525,228.00	45,496.00	0.045	SHUT DOWN
27	2,570,724.00	30,074.00	0.030	
28	2,600,798.00	41,638.00	0.042	
29	2,642,436.00	46,179.00	0.046	
30	2,688,615.00	30,914.00	0.031	
31	2,719,529.00	44,427.00	0.044	
September 01	2,763,956.00			
<b>TOTAL</b>			1.079	
<b>AVERAGE</b>			0.035	



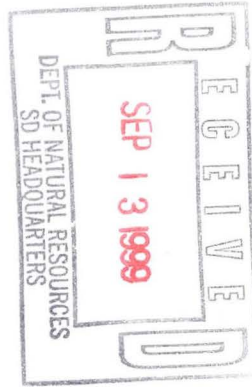
EFFLUENT FLOW FROM PLANT

YEAR: 1999					
MONTH: AUGUST	NPDES STATION	TOTAL DAY'S	X2	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)		MGD	
1	814,032.60	5330.70	10,661.40	0.011	SHUT DOWN WK. AVE. RESET
2	819,363.30	-817827.15	(1,635,654.30)	0.024	
3	1,536.15	15635.01	31,270.02	0.031	
4	17,171.16	13793.07	27,586.14	0.028	
5	30,964.23	15252.82	30,505.64	0.031	
6	46,217.05	13953.13	27,906.26	0.028	
7	60,170.18	14860.35	29,720.70	0.030	
8	75,030.53	16896.31	33,792.62	0.034	
9	91,926.84	13355.66	26,711.32	0.027	
10	105,282.50	15729.20	31458.40	0.031	
11	121,011.70	12675.20	25350.40	0.025	
12	133,686.90	8907.40	17814.80	0.018	
13	142,594.30	12764.60	25529.20	0.026	
14	155,358.90	18366.20	36732.40	0.037	
15	173,725.10	19892.60	39785.20	0.040	
16	193,617.70	14627.10	29254.20	0.029	
17	208,244.80	17133.30	34266.60	0.034	
18	225,378.10	16523.70	33047.40	0.033	
19	241,901.80	16488.70	32977.40	0.033	
20	258,390.50	17754.60	35509.20	0.036	
21	276,145.10	14435.30	28870.60	0.029	SHUT DOWN SHUT DOWN SHUT DOWN
22	290,580.40	12505.70	25011.40	0.025	
23	303,086.10	15419.10	30838.20	0.031	
24	318,505.20	0.00	0.00	0.000	
25	318,505.20	284.20	568.40	0.001	
26	318,789.40	19368.10	38736.20	0.039	
27	338,157.50	14363.10	28726.20	0.029	
28	352,520.60	18262.90	36525.80	0.037	
29	370,783.50	18852.40	37704.80	0.038	
30	389,635.90	13671.20	27342.40	0.027	
31	403,307.10	20939.10	41878.20	0.042	
September 01	424,246.20				
<b>TOTAL</b>				0.884	
<b>AVERAGE</b>				0.030	



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



# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 15983      QC Prep Batch Number: 991672      Sample analyzed within 7 Day(s) from collection.										
Client ID: 990803WA01P      Sample Description:      Collection: 8/3/99      Time: 13:20										
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
1,1,1-Trichloroethane	235	ug/l	2.3	7.3	40	10		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/10/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
1,1-Dichloroethane	24	ug/l	1.5	4.8	85	10		8260	cps	8/10/99
1,1-Dichloroethene	14	ug/l	3.6	11	0.7	10		8260	cps	8/10/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/10/99
1,2,4-Trimethylbenzene	6.5	ug/l	2.9	9.2	ns	10	J	8260	cps	8/10/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/10/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	8/10/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/10/99
1,3,5-Trimethylbenzene	3.4	ug/l	2.3	7.3	ns	10	J	8260	cps	8/10/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/10/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/10/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/10/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/10/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/10/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/10/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/10/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/10/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/10/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/10/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/10/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/10/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/10/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/10/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/10/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	cps	8/10/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/10/99
cis-1,2-Dichloroethene	53	ug/l	2	6.4	7	10		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/10/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	cps	8/10/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	cps	8/10/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	cps	8/10/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	cps	8/10/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	cps	8/10/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/10/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	cps	8/10/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	cps	8/10/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	cps	8/10/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	cps	8/10/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	cps	8/10/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/10/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	cps	8/10/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	cps	8/10/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
Tetrachloroethene	8.9	ug/l	2.9	9.2	0.5	10	J	8260	cps	8/10/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	cps	8/10/99
trans-1,2-Dichloroethene	19	ug/l	1.6	5.1	20	10		8260	cps	8/10/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	cps	8/10/99
Trichloroethene	612	ug/l	1.6	5.1	0.5	10		8260	cps	8/10/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	cps	8/10/99

Sample Number: 15988 QC Prep Batch Number: 991672 Sample analyzed within 7 Day(s) from collection.

Client ID: 990803WA07P Sample Description: Collection: 8/3/99 Time: 14:00

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	0.28	ug/l	0.23	0.73	40	1	J	8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99



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

## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
DATE REPORTED: 11-Aug-99  
DATE RECEIVED: 03-Aug-99  
SAMPLE TEMP (C): Rec On Ice  
PROJECT ID: Monthly Sampling  
PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	0.73	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/10/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	4.1	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	0.23	ug/l	0.2	0.64	7	1	J	8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	0.72	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	1.2	ug/l	0.16	0.51	0.5	1		8260	cps	8/10/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 15989      QC Prep Batch Number: 991672      Sample analyzed within 7 Day(s) from collection  
 Client ID: 990803WA09P      Sample Description:      Collection: 8/3/99      Time: 14:10

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99



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James Chang  
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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	1.1	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.25	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 15990      QC Prep Batch Number:      Sample analyzed within 1 Day(s) from collection.

Client ID: Trip Blank      Sample Description:      Collection: 8/3/99      Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/4/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/4/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/4/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/4/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/4/99



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 Ashippun, WI 53003

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/4/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/4/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/4/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/4/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/4/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/4/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/4/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/4/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/4/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/4/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/4/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/4/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/4/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/4/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/4/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/4/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/4/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/4/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/4/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/4/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/4/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/4/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/4/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/4/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/4/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/4/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/4/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/4/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/4/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/4/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/4/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/4/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/4/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/4/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/4/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/4/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/4/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/4/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/4/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/4/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/4/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/4/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/4/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
DATE REPORTED: 11-Aug-99  
DATE RECEIVED: 03-Aug-99  
SAMPLE TEMP (C): Rec On Ice  
PROJECT ID: Monthly Sampling  
PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/4/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/4/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/4/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/4/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/4/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/4/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/4/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/4/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/4/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/4/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/4/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/4/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/4/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/4/99
Trichloroethene	< 0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/4/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/4/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/4/99

Approved By: 

Date: 8/11/99

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.

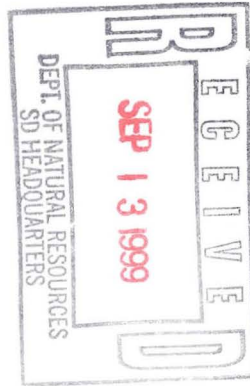
DNR Analytical Detection Limit Guidance, April 1995.





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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 15983      QC Prep Batch Number: 991672      Sample analyzed within 7 Day(s) from collection.										
Client ID: 990803WA01P      Sample Description:      Collection: 8/3/99      Time: 13:20										
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
1,1,1-Trichloroethane	235	ug/l	2.3	7.3	40	10		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/10/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
1,1-Dichloroethane	24	ug/l	1.5	4.8	85	10		8260	cps	8/10/99
1,1-Dichloroethene	14	ug/l	3.6	11	0.7	10		8260	cps	8/10/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/10/99
1,2,4-Trimethylbenzene	6.5	ug/l	2.9	9.2	ns	10	J	8260	cps	8/10/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/10/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	8/10/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/10/99
1,3,5-Trimethylbenzene	3.4	ug/l	2.3	7.3	ns	10	J	8260	cps	8/10/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/10/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/10/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/10/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/10/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/10/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/10/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/10/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/10/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/10/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/10/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/10/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/10/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/10/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/10/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/10/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	cps	8/10/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/10/99
cis-1,2-Dichloroethene	53	ug/l	2	6.4	7	10		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/10/99



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James Chang  
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 2572 Oak St.  
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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	cps	8/10/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	cps	8/10/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	cps	8/10/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	cps	8/10/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	cps	8/10/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/10/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	cps	8/10/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	cps	8/10/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	cps	8/10/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	cps	8/10/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	cps	8/10/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/10/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	cps	8/10/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	cps	8/10/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
Tetrachloroethene	8.9	ug/l	2.9	9.2	0.5	10	J	8260	cps	8/10/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	cps	8/10/99
trans-1,2-Dichloroethene	19	ug/l	1.6	5.1	20	10		8260	cps	8/10/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	cps	8/10/99
Trichloroethene	612	ug/l	1.6	5.1	0.5	10		8260	cps	8/10/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	cps	8/10/99

Sample Number: 15988 QC Prep Batch Number: 991672 Sample analyzed within 7 Days from collection

Client ID: 990803WA07P Sample Description: Collection: 8/3/99 Time: 14:00

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	0.28	ug/l	0.23	0.73	40	1	J	8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
12Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	0.73	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/10/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	4.1	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	0.23	ug/l	0.2	0.64	7	1	J	8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	0.72	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99



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 Ashippun, WI 53003

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	1.2	ug/l	0.16	0.51	0.5	1		8260	cps	8/10/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 15989      QC Prep Batch Number: 991672      Sample analyzed within 7 Day(s) from collection.  
 Client ID: 990803WA09P      Sample Description:      Collection: 8/3/99      Time: 14:10

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	1.1	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.25	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number	15990	QC Prep Batch Number:	Sample analyzed within 1 Day(s) from collection.							
Client ID	Trip Blank	Sample Description:	Collection:	8/3/99	Time:					
1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1	8260	cps	8/4/99	
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1	8260	cps	8/4/99	
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1	8260	cps	8/4/99	
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1	8260	cps	8/4/99	
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1	8260	cps	8/4/99	



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/4/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/4/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/4/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/4/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/4/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/4/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/4/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/4/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/4/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/4/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/4/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/4/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/4/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/4/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/4/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/4/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/4/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/4/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/4/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/4/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/4/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/4/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/4/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/4/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/4/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/4/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/4/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/4/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/4/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/4/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/4/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/4/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/4/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/4/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/4/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/4/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/4/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/4/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/4/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/4/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/4/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/4/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/4/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990592  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampling  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	<0.21	ug/l	0.21	0.67	12	1		8260	cps	8/4/99
Methylene chloride	<0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/4/99
n-Butylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/4/99
n-Propylbenzene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/4/99
Naphthalene	<0.46	ug/l	0.46	1.5	8	1		8260	cps	8/4/99
o-xylene	<0.18	ug/l	0.18	0.57	124	1		8260	cps	8/4/99
p-Isopropyltoluene	<0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/4/99
sec-Butylbenzene	<0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/4/99
Styrene	<0.21	ug/l	0.21	0.67	10	1		8260	cps	8/4/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/4/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/4/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/4/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/4/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/4/99
Trichloroethene	<0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/4/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/4/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/4/99

Approved By: 

Date: 8/11/99

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 990592  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C) Rec On Ice  
 PROJECT ID: Monthly Sampli  
 PROJECT NAME:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 15983										
Client ID: 990803WA01P										
							Collection: 8/3/99	Time: 13:20		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/10/99	991651	
Barium - ICAP	0.14	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/9/99	991616	
Cadmium - Furnace AA	1.2	ug/l	J RJ	0.7	2.2	213.2	dmd/rf	8/10/99	991649	
Cadmium-Total Recoverable	1.1	ug/l	J TR	0.7	2.2	7131	dmd/rf	8/10/99	991650	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/9/99	991616	
Copper- ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/9/99	991616	
Iron - ICAP	1.2	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/9/99	991616	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/9/99	991626	
Manganese - ICAP	0.19	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/9/99	991616	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	8/10/99	991640	
Nickel - ICAP	0.06	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/9/99	991616	
Selenium - Furnace AA	35	ug/l	RJ	7.8	25	270.2	dmd/rf	8/10/99	991653	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/9/99	991616	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/4/99	991591	
Zinc - ICAP	0.02	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/9/99	991616	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/4/99	991721	
COD, Total	<3.4	mg/l		3.4	11	410.4-CT	mp	8/9/99	991638	
Cyanide, Amenable	<0.006	mg/l		0.006	0.02	335.2	srh	8/10/99	991660	
Cyanide, Total	<0.006	mg/l		0.006	0.02	335.2	srh	8/10/99	991656	
pH (water)	7.4	s.u.	#			150.1	ag	8/3/99	991601	
Solids, Total Suspended	<1.0	mg/l		1	3.2	SM 2540	mp	8/9/99	991652	

Nova Sample Number: 15984

Client ID: 990803WA09R

Collection: 8/3/99

Time:

Sample Description:

Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/10/99	991651	
Barium - ICAP	0.04	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/9/99	991616	
Cadmium - Furnace AA	4	ug/l	RJ	0.7	2.2	213.2	dmd/rf	8/10/99	991649	
Cadmium-Total Recoverable	3.5	ug/l	TR	0.7	2.2	7131	dmd/rf	8/10/99	991650	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/9/99	991616	
Copper- ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/9/99	991616	
Iron - ICAP	<0.078	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/9/99	991616	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/9/99	991626	





# INORGANIC REPORT

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

WDNR# 241340550

INVOICE NUMBER: 990592  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 03-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Monthly Sampli  
 PROJECT NAME:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Manganese - ICAP	0.03	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/9/99	991616	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	8/10/99	991640	
Nickel - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/9/99	991616	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	8/10/99	991653	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/9/99	991616	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/4/99	991591	
Zinc - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7		8/9/99	991616	
COD. Total	<3.4	mg/l		3.4	11	410.4-CT	mp	8/9/99	991638	
Nitrate + Nitrite Nitrogen	0.14	mg/l		0.04	0.13	353.3	srh	8/10/99	991662	
Nitrogen, Ammonia	<0.1	mg/l		0.1	0.32	350.1	128053	8/13/99	991724	
Phosphorus, Total	<0.1	mg/l		0.1	0.32	365.2	128053	8/5/99	991722	
Solids, Total Suspended	<0.5	mg/l		0.5	1.6	SM 2540	mp	8/9/99	991652	

Nova Sample Number: 15985

Client ID: 990803WA02P

Collection: 8/3/99 Time: 13:30

Sample Description:

pH (water) 10 s.u. # 150.1

ag 8/3/99 991601

Nova Sample Number: 15986

Client ID: 990803WA03P

Collection: 8/3/99 Time: 13:40

Sample Description:

pH (water) 11 s.u. # 150.1

ag 8/3/99 991601

Nova Sample Number: 15987

Client ID: 990803WA05P

Collection: 8/3/99 Time: 13:30

Sample Description:

pH (water) 7.1 s.u. # 150.1

ag 8/3/99 991601

Nova Sample Number: 15989

Client ID: 990803WA09P

Collection: 8/3/99 Time: 14:10

Sample Description:

Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/4/99	991721	
Cyanide, Amenable	<0.006	mg/l		0.006	0.02	335.2	srh	8/10/99	991660	
Cyanide, Total	<0.006	mg/l		0.006	0.02	335.2	srh	8/10/99	991656	



**INORGANIC REPORT**

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

WDNR# 241340550

INVOICE NUMBER 990592  
DATE REPORTED: 31-Aug-99  
DATE RECEIVED: 03-Aug-99  
SAMPLE TEMP (C) Rec On Ice  
PROJECT ID: Monthly Sampli  
PROJECT NAME:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
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Approved By:  Date: 8/31/99  
James Chang, Ph.D., Lab Director

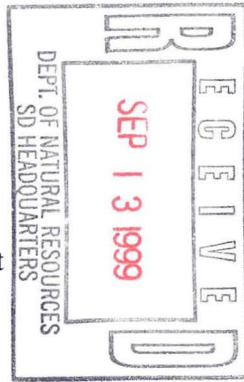
**RJ** Result expressed as Total.  
**TR** Result expressed as Total Recoverable.

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 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  
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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 Ashippun, WI 53003



# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 16031		QC Prep Batch Number: 991672		Sample analyzed within 1 Day(s) from collection.						
Client ID: 990809WA01P		Sample Description:		Collection: 8/9/99		Time: 14:30				
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
1,1,1-Trichloroethane	280	ug/l	2.3	7.3	40	10		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/10/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
1,1-Dichloroethane	26	ug/l	1.5	4.8	85	10		8260	cps	8/10/99
1,1-Dichloroethene	16	ug/l	3.6	11	0.7	10		8260	cps	8/10/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/10/99
1,2,4-Trimethylbenzene	4	ug/l	2.9	9.2	ns	10	J	8260	cps	8/10/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/10/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	8/10/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/10/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/10/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/10/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/10/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/10/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/10/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/10/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/10/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/10/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/10/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/10/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/10/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/10/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/10/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/10/99
Chloroform	13	ug/l	2.7	8.6	0.6	10		8260	cps	8/10/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/10/99
cis-1,2-Dichloroethene	58	ug/l	2	6.4	7	10		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/10/99



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 2572 Oak St.  
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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	cps	8/10/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	cps	8/10/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	cps	8/10/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	cps	8/10/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	cps	8/10/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/10/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	cps	8/10/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	cps	8/10/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	cps	8/10/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	cps	8/10/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	cps	8/10/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/10/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	cps	8/10/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	cps	8/10/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
Tetrachloroethene	10	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	cps	8/10/99
trans-1,2-Dichloroethene	21	ug/l	1.6	5.1	20	10		8260	cps	8/10/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	cps	8/10/99
Trichloroethene	697	ug/l	1.6	5.1	0.5	10		8260	cps	8/10/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	cps	8/10/99

Sample Number	16036	QC Prep Batch Number	991672	Sample analyzed within	1 Day(s) from collection				
Client ID	990809WA07P	Sample Description	Collection	8/9/99	Time	14:40			
1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1	8260	cps	8/10/99
1,1,1-Trichloroethane	<0.23	ug/l	0.23	0.73	40	1	8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1	8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1	8260	cps	8/10/99
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1	8260	cps	8/10/99
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1	8260	cps	8/10/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1	8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1	8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1	8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1	8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1	8260	cps	8/10/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1	8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1	8260	cps	8/10/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1	8260	cps	8/10/99



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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	0.33	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/10/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	2	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	2.3	ug/l	0.77	2.4	0.3	1	J	8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	0.41	ug/l	0.21	0.67	6	1	J	8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.26	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 16037		QC Prep Batch Number: 991672					Sample analyzed within 1 Day(s) from collection				
Client ID: 990809WA09P		Sample Description:					Collection: 8/9/99		Time: 14:15		
1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99	
1,1,1-Trichloroethane	<0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99	
1,1,1,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99	
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99	
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99	
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99	
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99	
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99	
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99	
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99	
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99	
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99	
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99	
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99	
1,2-Dichloropropane	<0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99	
1,3,5-Trimethylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99	
1,3-Dichlorobenzene	<0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99	
1,3-Dichloropropane	<0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99	
1,4-Dichlorobenzene	<0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99	
1,2-Dibromo-3-chloropropan	<0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99	
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99	
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99	
2-Chloroethyl Vinyl Ether	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99	
2-Chlorotoluene	<0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99	
4-Chlorotoluene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99	
4-Methyl-2-Pentanone	<0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99	
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99	
Benzene	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99	
Bromobenzene	<0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99	
Bromochloromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99	
Bromodichloromethane	<0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99	



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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	1.4	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.32	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 16038      QC Prep Batch Number: 991672      Sample analyzed within: 1 Day(s) from collection

Client ID: Trip Blank      Sample Description:      Collection: 8/9/99      Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99



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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
1,2-Dichloropropane	<0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	<0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	<0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	<0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	<0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	<0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	<0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	<0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	<0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99
Bromoform	<0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	<0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	<0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	<0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	<0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	<0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	<0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	<0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	<0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	<0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	<0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	<0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	<0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	<0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	<0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99





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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	<0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	<0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	<0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	<0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	<0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	<0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	<0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	<0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/10/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Approved By:  Date: 8/11/99  
 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

WDNR# 241340550

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

INVOICE NUMBER: 990606  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/13/99	991694	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd/rf	8/11/99	991665	
Zinc - ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/13/99	991694	

Nova Sample Number: 16033

Client ID: 990809WA02P

Collection: 8/9/99 Time: 14:45

Sample Description:

pH (water) 10 s.u. # 150.1 sh 8/10/99 991663

Nova Sample Number: 16034

Client ID: 990809WA03P

Collection: 8/9/99 Time: 14:46

Sample Description:

pH (water) 11 s.u. # 150.1 sh 8/10/99 991663

Nova Sample Number: 16035

Client ID: 990809WA05P

Collection: 8/9/99 Time: 14:35

Sample Description:

pH (water) 7.5 s.u. # 150.1 sh 8/10/99 991663

Nova Sample Number: 16037

Client ID: 990809WA09P

Collection: 8/9/99 Time: 14:15

Sample Description:

Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/10/99	991701
Cyanide, Amenable	<0.006	mg/l		0.006	0.02	335.2	srh	8/12/99	991688
Cyanide, Total	<0.006	mg/l		0.006	0.02	335.2	srh	8/12/99	991687

Approved By: 

James Chang, Ph.D., Lab Director

Date: 8/31/99

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 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

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: 990606  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 16031										
Client ID: 990809WA01P										
							Collection: 8/9/99	Time: 14:30		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/10/99	991651	
Barium - ICAP	0.12	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/13/99	991694	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/10/99	991649	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/13/99	991694	
Copper- ICAP	0.02	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/13/99	991694	
Iron - ICAP	1.3	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/13/99	991694	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/11/99	991664	
Manganese - ICAP	0.14	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/13/99	991694	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/12/99	991682	
Nickel - ICAP	0.04	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/13/99	991694	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	8/10/99	991653	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/13/99	991694	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd/rf	8/11/99	991665	
Zinc - ICAP	0.02	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/13/99	991694	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/10/99	991701	
Cyanide, Amenable	<0.006	mg/l		0.006	0.02	335.2	srh	8/12/99	991688	
Cyanide, Total	<0.006	mg/l		0.006	0.02	335.2	srh	8/12/99	991687	
pH (water)	7.1	s.u.	#			150.1	sh	8/10/99	991663	

Nova Sample Number: 16032

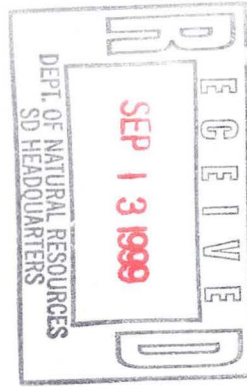
Client ID: 990809WA09R

							Collection: 8/9/99	Time: 14:20		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/10/99	991651	
Barium - ICAP	0.02	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/13/99	991694	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/10/99	991649	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/13/99	991694	
Copper- ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/13/99	991694	
Iron - ICAP	0.2	mg/l	J RJ	0.078	0.25	200.7	dmd/rf	8/13/99	991694	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/11/99	991664	
Manganese - ICAP	0.02	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/13/99	991694	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/12/99	991682	
Nickel - ICAP	12	ug/l	J RJ	10	32	200.7	dmd/rf	8/13/99	991694	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	8/10/99	991653	



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
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Sample Number: 16031      QC Prep Batch Number: 991672      Sample analyzed within 1 Day(s) from collection.  
 Client ID: 990809WA01P      Sample Description:      Collection: 8/9/99      Time: 14:30

1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
1,1,1-Trichloroethane	280	ug/l	2.3	7.3	40	10		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/10/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
1,1-Dichloroethane	26	ug/l	1.5	4.8	85	10		8260	cps	8/10/99
1,1-Dichloroethene	16	ug/l	3.6	11	0.7	10		8260	cps	8/10/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/10/99
1,2,4-Trimethylbenzene	4	ug/l	2.9	9.2	ns	10	J	8260	cps	8/10/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/10/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	8/10/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/10/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/10/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/10/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/10/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/10/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/10/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/10/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/10/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/10/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/10/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/10/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/10/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/10/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/10/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/10/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/10/99
Chloroform	13	ug/l	2.7	8.6	0.6	10		8260	cps	8/10/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/10/99
cis-1,2-Dichloroethene	58	ug/l	2	6.4	7	10		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/10/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	cps	8/10/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	cps	8/10/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	cps	8/10/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	cps	8/10/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	cps	8/10/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	cps	8/10/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/10/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	cps	8/10/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	cps	8/10/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	cps	8/10/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/10/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	cps	8/10/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	cps	8/10/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	cps	8/10/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/10/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	cps	8/10/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	cps	8/10/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	cps	8/10/99
Tetrachloroethene	10	ug/l	2.9	9.2	0.5	10		8260	cps	8/10/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	cps	8/10/99
trans-1,2-Dichloroethene	21	ug/l	1.6	5.1	20	10		8260	cps	8/10/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	cps	8/10/99
Trichloroethene	697	ug/l	1.6	5.1	0.5	10		8260	cps	8/10/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	cps	8/10/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	cps	8/10/99

Sample Number: 16036	QC Prep Batch Number: 991672	Sample analyzed within 1 Day(s) from collection						
Client ID: 990809WA07P	Sample Description:	Collection: 8/9/99	Time: 14:40					
1,1,1,2-Tetrachloroethane	<0.2 ug/l	0.2	0.64	ns	1	8260	cps	8/10/99
1,1,1-Trichloroethane	<0.23 ug/l	0.23	0.73	40	1	8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29 ug/l	0.29	0.92	0.02	1	8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29 ug/l	0.29	0.92	0.5	1	8260	cps	8/10/99
1,1-Dichloroethane	<0.15 ug/l	0.15	0.48	85	1	8260	cps	8/10/99
1,1-Dichloroethene	<0.36 ug/l	0.36	1.1	0.7	1	8260	cps	8/10/99
1,1-Dichloropropene	<0.49 ug/l	0.49	1.6	ns	1	8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22 ug/l	0.22	0.7	ns	1	8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6 ug/l	0.6	1.9	ns	1	8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16 ug/l	0.16	0.51	14	1	8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29 ug/l	0.29	0.92	ns	1	8260	cps	8/10/99
1,2-Dibromoethane	<0.24 ug/l	0.24	0.76	0.005	1	8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2 ug/l	0.2	0.64	60	1	8260	cps	8/10/99
1,2-Dichloroethane	<0.19 ug/l	0.19	0.6	0.5	1	8260	cps	8/10/99



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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	0.33	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/10/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	2	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	2.3	ug/l	0.77	2.4	0.3	1	J	8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	0.41	ug/l	0.21	0.67	6	1	J	8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.26	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 16037      QC Prep Batch Number: 991672      Sample analyzed within 1 Day(s) from collection.  
 Client ID: 990809WA09P      Sample Description:      Collection: 8/9/99      Time: 14:15

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	<0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
1,2-Dichloropropane	<0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	<0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	<0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	<0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	<0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	<0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	<0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	<0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	<0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	<0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	<0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	<0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	<0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	1.4	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	<0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	<0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	<0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	<0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	<0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	<0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	<0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	<0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	<0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	<0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99
Methyl-t-butyl ether	<0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	<0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	<0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	<0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	<0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	<0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	<0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	0.32	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/10/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

Sample Number: 16038

QC Prep Batch Number: 991672

Sample analyzed within 1 Day(s) from collection

Client ID: Trip Blank

Sample Description:

Collection: 8/9/99

Time:

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
1,1,1-Trichloroethane	<0.23	ug/l	0.23	0.73	40	1		8260	cps	8/10/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/10/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
1,1-Dichloroethane	<0.15	ug/l	0.15	0.48	85	1		8260	cps	8/10/99





8222 W. Calumet Rd., Milwaukee, WI 53223  
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James Chang  
Oconomowoc Groundwater Treatment Plant  
2572 Oak St.  
Ashippun, WI 53003

## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990606  
DATE REPORTED: 11-Aug-99  
DATE RECEIVED: 10-Aug-99  
SAMPLE TEMP (C): Rec On Ice  
PROJECT ID: Weekly Sampling  
PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/10/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/10/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/10/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/10/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/10/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/10/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/10/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/10/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/10/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/10/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/10/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/10/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/10/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/10/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/10/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/10/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/10/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/10/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/10/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/10/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/10/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/10/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/10/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/10/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/10/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/10/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/10/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/10/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/10/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/10/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/10/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/10/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/10/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/10/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/10/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/10/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/10/99



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# ORGANIC REPORT

WDNR# 241340550

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

BATCH NUMBER: 990606  
 DATE REPORTED: 11-Aug-99  
 DATE RECEIVED: 10-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	<0.21	ug/l	0.21	0.67	12	1		8260	cps	8/10/99
Methylene chloride	<0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/10/99
n-Butylbenzene	<0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/10/99
n-Propylbenzene	<0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/10/99
Naphthalene	<0.46	ug/l	0.46	1.5	8	1		8260	cps	8/10/99
o-xylene	<0.18	ug/l	0.18	0.57	124	1		8260	cps	8/10/99
p-Isopropyltoluene	<0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/10/99
sec-Butylbenzene	<0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/10/99
Styrene	<0.21	ug/l	0.21	0.67	10	1		8260	cps	8/10/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/10/99
Tetrachloroethene	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/10/99
Toluene	<0.33	ug/l	0.33	1	68.6	1		8260	cps	8/10/99
trans-1,2-Dichloroethene	<0.16	ug/l	0.16	0.51	20	1		8260	cps	8/10/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/10/99
Trichloroethene	<0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/10/99
Trichlorofluoromethane	<0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/10/99
Vinyl chloride	<0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/10/99

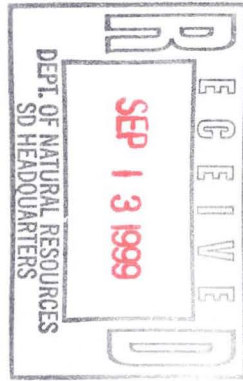
Approved By:  Date: 8/11/99  
 James Chang, Ph.D., Lab Director

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



# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 16110										
QC Prep Batch Number: 991748										
Sample analyzed within 2 Day(s) from collection.										
Client ID: 990816WA01P Sample Description: Collection: 8/16/99 Time: 15:10										
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/18/99
1,1,1-Trichloroethane	350	ug/l	2.3	7.3	40	10		8260	cps	8/18/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/18/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/18/99
1,1-Dichloroethane	32	ug/l	1.5	4.8	85	10		8260	cps	8/18/99
1,1-Dichloroethene	23	ug/l	3.6	11	0.7	10		8260	cps	8/18/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/18/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/18/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/18/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/18/99
1,2,4-Trimethylbenzene	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/18/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/18/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	8/18/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/18/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/18/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/18/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/18/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/18/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/18/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/18/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/18/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/18/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/18/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/18/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/18/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/18/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/18/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/18/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/18/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/18/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/18/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/18/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/18/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/18/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/18/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/18/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	cps	8/18/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/18/99
cis-1,2-Dichloroethene	65	ug/l	2	6.4	7	10		8260	cps	8/18/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/18/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	< 2.1	ug/l	2.1	6.7	6	10		8260	cps	8/18/99
Dibromomethane	< 3.5	ug/l	3.5	11	ns	10		8260	cps	8/18/99
Dichlorodifluoromethane	< 3.6	ug/l	3.6	11	200	10		8260	cps	8/18/99
Ethylbenzene	< 1.6	ug/l	1.6	5.1	140	10		8260	cps	8/18/99
Hexachlorobutadiene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/18/99
Isopropyl Ether	< 3.2	ug/l	3.2	10	ns	10		8260	cps	8/18/99
Isopropylbenzene	< 1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/18/99
m&p-xylene	< 3.6	ug/l	3.6	11	124	10		8260	cps	8/18/99
Methyl-t-butyl ether	< 2.1	ug/l	2.1	6.7	12	10		8260	cps	8/18/99
Methylene chloride	< 7.6	ug/l	7.6	24	0.5	10		8260	cps	8/18/99
n-Butylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/18/99
n-Propylbenzene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/18/99
Naphthalene	< 4.6	ug/l	4.6	15	8	10		8260	cps	8/18/99
o-xylene	< 1.8	ug/l	1.8	5.7	124	10		8260	cps	8/18/99
p-Isopropyltoluene	< 1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/18/99
sec-Butylbenzene	< 3	ug/l	3	9.5	ns	10		8260	cps	8/18/99
Styrene	< 2.1	ug/l	2.1	6.7	10	10		8260	cps	8/18/99
tert-Butylbenzene	< 2	ug/l	2	6.4	ns	10		8260	cps	8/18/99
Tetrachloroethene	6.8	ug/l	2.9	9.2	0.5	10	J	8260	cps	8/18/99
Toluene	< 3.3	ug/l	3.3	10	68.6	10		8260	cps	8/18/99
trans-1,2-Dichloroethene	20	ug/l	1.6	5.1	20	10		8260	cps	8/18/99
trans-1,3-Dichloropropene	< 2	ug/l	2	6.4	0.02	10		8260	cps	8/18/99
Trichloroethene	780	ug/l	1.6	5.1	0.5	10		8260	cps	8/18/99
Trichlorofluoromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/18/99
Vinyl chloride	2.4	ug/l	2.1	6.7	0.02	10	J	8260	cps	8/18/99

Sample Number: 16115      QC Prep Batch Number: 991748      Sample analyzed within 2 Day(s) from collection.  
 Client ID: 990816WA07P      Sample Description:      Collection: 8/16/99      Time: 15:05

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/18/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/18/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/18/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/18/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/18/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
1,2,3-Trichloropropane	3.2	ug/l	0.6	1.9	ns	1		8260	cps	8/18/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/18/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/18/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/18/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/18/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/18/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/18/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/18/99
12Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/18/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/18/99
2-Butanone (MEK)	44	ug/l	1.4	4.4	90	1		8260	cps	8/18/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/18/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/18/99
Acetone	15	ug/l	1.6	4.9	200	1		8260	cps	8/18/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/18/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Bromodichloromethane	0.3	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/18/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/18/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/18/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/18/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/18/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/18/99
Chloroform	1.7	ug/l	0.27	0.86	0.6	1		8260	cps	8/18/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/18/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/18/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/18/99
Dibromochloromethane	0.48	ug/l	0.21	0.67	6	1	J	8260	cps	8/18/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/18/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/18/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/18/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/18/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/18/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/18/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/18/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/18/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/18/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/18/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/18/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/18/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/18/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/18/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/18/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/18/99
Trichloroethene	0.2	ug/l	0.16	0.51	0.5	1	J	8260	cps	8/18/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/18/99

Sample Number: 16116

QC Prep Batch Number: 991748

Sample analyzed within 2 Day(s) from collection.

Client ID: Trip blank

Sample Description:

Collection: 8/16/99 Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/18/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/18/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/18/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/18/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/18/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/18/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/18/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/18/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/18/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/18/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/18/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/18/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/18/99
1,2-Dibromo-3-chloropropane	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/18/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/18/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/18/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/18/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/18/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/18/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/18/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/18/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/18/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/18/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/18/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/18/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/18/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/18/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/18/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/18/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/18/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/18/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/18/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/18/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/18/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/18/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/18/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/18/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/18/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/18/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/18/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/18/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/18/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/18/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/18/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/18/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/18/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/18/99
Trichloroethene	< 0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/18/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/18/99

Sample Number: 16117

QC Prep Batch Number: 991748

Sample analyzed within 2 Day(s) from collection

Client ID: 990816WA09P

Sample Description:

Collection: 8/16/99 Time: 15:25

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/18/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/18/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/18/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/18/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/18/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/18/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/18/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/18/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/18/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/18/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/18/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/18/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/18/99
1,2-Dibromo-3-chloropropane	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/18/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/18/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/18/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/18/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/18/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/18/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/18/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/18/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/18/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Bromodichloromethane	0.34	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/18/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/18/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/18/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/18/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/18/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/18/99
Chloroform	1.9	ug/l	0.27	0.86	0.6	1		8260	cps	8/18/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/18/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/18/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/18/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/18/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/18/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/18/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/18/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/18/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/18/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/18/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/18/99





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James Chang  
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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990623  
 DATE REPORTED: 20-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/18/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/18/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/18/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/18/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/18/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/18/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/18/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/18/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/18/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/18/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/18/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/18/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/18/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/18/99
Trichloroethene	< 0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/18/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/18/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/18/99

Approved By: 

Date: 8/31/99

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 990623  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C) Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/18/99	991731	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/24/99	991788	
Zinc - ICAP	0.06	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/18/99	991731	

Nova Sample Number: 16112

Client ID: 990816WA02P

Collection: 8/16/99 Time: 15:15

Sample Description:

pH (water) 10 s.u. #

150.1

sh 8/16/99 991718

Nova Sample Number: 16113

Client ID: 990816WA03P

Collection: 8/16/99 Time: 15:17

Sample Description:

pH (water) 11 s.u. #

150.1

sh 8/16/99 991718

Nova Sample Number: 16114

Client ID: 990816WA05P

Collection: 8/16/99 Time: 15:00

Sample Description:

pH (water) 6.7 s.u. #

150.1

sh 8/16/99 991718

Nova Sample Number: 16117

Client ID: 990816WA09P

Collection: 8/16/99 Time: 15:25

Sample Description:

Chromium, Hexavalent <0.0042 mg/l

0.004 0.01 SM 3500

128053 8/17/99 991755

Cyanide, Amenable <0.006 mg/l

0.006 0.02 335.2

128053 8/30/99 991857

Cyanide, Total <0.006 mg/l

0.006 0.02 335.2

srh 8/19/99 991778

Approved By: 

James Chang, Ph.D., Lab Director

Date: 8/31/99

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 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

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 990623  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 16-Aug-99  
 SAMPLE TEMP (C) Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 16110										
Client ID: 990816WA01P										
							Collection: 8/16/99	Time: 15:10		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/20/99	991763	
Barium - ICAP	0.11	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/18/99	991731	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/19/99	991743	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/18/99	991731	
Copper- ICAP	0.02	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/18/99	991731	
Iron - ICAP	1.4	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/18/99	991731	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/19/99	991744	
Manganese - ICAP	0.13	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/18/99	991731	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/18/99	991734	
Nickel - ICAP	19	ug/l	J RJ	10	32	200.7	dmd/rf	8/18/99	991731	
Selenium - Furnace AA	15	ug/l	J RJ	7.8	25	270.2	dmd/rf	8/23/99	991770	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/18/99	991731	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/24/99	991788	
Zinc - ICAP	0.03	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/18/99	991731	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/17/99	991755	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	128053	8/30/99	991857	
Cyanide, Total	0.009	mg/l	J	0.006	0.02	335.2	srh	8/19/99	991778	
pH (water)	7	s.u.	#			150.1	sh	8/16/99	991718	

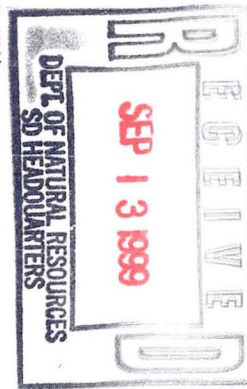
Nova Sample Number: 16111  
 Client ID: 990816WA09R

							Collection: 8/16/99	Time: 15:30		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/20/99	991763	
Barium - ICAP	0.03	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/18/99	991731	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/19/99	991743	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/18/99	991731	
Copper- ICAP	0.04	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/18/99	991731	
Iron - ICAP	0.27	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/18/99	991731	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/19/99	991744	
Manganese - ICAP	0.01	mg/l	J RJ	0.004	0.01	200.7	dmd/rf	8/18/99	991731	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/18/99	991734	
Nickel - ICAP	12	ug/l	J RJ	10	32	200.7	dmd/rf	8/18/99	991731	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	8/23/99	991770	



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 16284		QC Prep Batch Number: 991839		Sample analyzed within 4 Day(s) from collection.						
Client ID: 990823WA01P		Sample Description:		Collection: 8/23/99		Time: 15:00				
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	8/27/99
1,1,1-Trichloroethane	244	ug/l	2.3	7.3	40	10		8260	cps	8/27/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	8/27/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	8/27/99
1,1-Dichloroethane	31	ug/l	1.5	4.8	85	10		8260	cps	8/27/99
1,1-Dichloroethene	15	ug/l	3.6	11	0.7	10		8260	cps	8/27/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	8/27/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/27/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	8/27/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	8/27/99
1,2,4-Trimethylbenzene	13	ug/l	2.9	9.2	ns	10		8260	cps	8/27/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	8/27/99
1,2-Dichlorobenzene	2	ug/l	2	6.4	60	10		8260	cps	8/27/99
1,2-Dichloroethane	2.1	ug/l	1.9	6	0.5	10	J	8260	cps	8/27/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	8/27/99
1,3,5-Trimethylbenzene	5.2	ug/l	2.3	7.3	ns	10	J	8260	cps	8/27/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	8/27/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	8/27/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	8/27/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	8/27/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	8/27/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	8/27/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	8/27/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	8/27/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	8/27/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	8/27/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	8/27/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	8/27/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	8/27/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/27/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	8/27/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	8/27/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	8/27/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	8/27/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	8/27/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	8/27/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	cps	8/27/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	8/27/99
cis-1,2-Dichloroethene	64	ug/l	2	6.4	7	10		8260	cps	8/27/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	8/27/99



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

## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	< 2.1	ug/l	2.1	6.7	6	10		8260	cps	8/27/99
Dibromomethane	< 3.5	ug/l	3.5	11	ns	10		8260	cps	8/27/99
Dichlorodifluoromethane	< 3.6	ug/l	3.6	11	200	10		8260	cps	8/27/99
Ethylbenzene	< 1.6	ug/l	1.6	5.1	140	10		8260	cps	8/27/99
Hexachlorobutadiene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	8/27/99
Isopropyl Ether	< 3.2	ug/l	3.2	10	ns	10		8260	cps	8/27/99
Isopropylbenzene	< 1.6	ug/l	1.6	5.1	ns	10		8260	cps	8/27/99
m&p-xylene	< 3.6	ug/l	3.6	11	124	10		8260	cps	8/27/99
Methyl-t-butyl ether	< 2.1	ug/l	2.1	6.7	12	10		8260	cps	8/27/99
Methylene chloride	< 7.6	ug/l	7.6	24	0.5	10		8260	cps	8/27/99
n-Butylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	8/27/99
n-Propylbenzene	3.1	ug/l	2.5	8	ns	10	J	8260	cps	8/27/99
Naphthalene	< 4.6	ug/l	4.6	15	8	10		8260	cps	8/27/99
o-xylene	< 1.8	ug/l	1.8	5.7	124	10		8260	cps	8/27/99
p-Isopropyltoluene	< 1.8	ug/l	1.8	5.7	ns	10		8260	cps	8/27/99
sec-Butylbenzene	< 3	ug/l	3	9.5	ns	10		8260	cps	8/27/99
Styrene	< 2.1	ug/l	2.1	6.7	10	10		8260	cps	8/27/99
tert-Butylbenzene	< 2	ug/l	2	6.4	ns	10		8260	cps	8/27/99
Tetrachloroethene	9.4	ug/l	2.9	9.2	0.5	10		8260	cps	8/27/99
Toluene	< 3.3	ug/l	3.3	10	68.6	10		8260	cps	8/27/99
trans-1,2-Dichloroethene	20	ug/l	1.6	5.1	20	10		8260	cps	8/27/99
trans-1,3-Dichloropropene	< 2	ug/l	2	6.4	0.02	10		8260	cps	8/27/99
Trichloroethene	662	ug/l	1.6	5.1	0.5	10		8260	cps	8/27/99
Trichlorofluoromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	8/27/99
Vinyl chloride	3.8	ug/l	2.1	6.7	0.02	10	J	8260	cps	8/27/99

Sample Number: 16289

QC Prep Batch Number: 991839

Sample analyzed within 4 Day(s) from collection.

Client ID: 990823WA07P Sample Description:

Collection: 8/23/99 Time: 15:40

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/27/99
1,1,1-Trichloroethane	0.56	ug/l	0.23	0.73	40	1	J	8260	cps	8/27/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/27/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/27/99
1,1-Dichloroethane	0.24	ug/l	0.15	0.48	85	1	J	8260	cps	8/27/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/27/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/27/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/27/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/27/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/27/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/27/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/27/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/27/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/27/99



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

## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/27/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/27/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/27/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/27/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/27/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/27/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/27/99
2-Butanone (MEK)	9.1	ug/l	1.4	4.4	90	1		8260	cps	8/27/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/27/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/27/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/27/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/27/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/27/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/27/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/27/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/27/99
Bromodichloromethane	0.29	ug/l	0.26	0.83	0.06	1	J	8260	cps	8/27/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/27/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/27/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/27/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/27/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/27/99
Chloroform	0.97	ug/l	0.27	0.86	0.6	1		8260	cps	8/27/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/27/99
cis-1,2-Dichloroethene	0.47	ug/l	0.2	0.64	7	1	J	8260	cps	8/27/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/27/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/27/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/27/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/27/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/27/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/27/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/27/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/27/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/27/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/27/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/27/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/27/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/27/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/27/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/27/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/27/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/27/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/27/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/27/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/27/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/27/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/27/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/27/99
Trichloroethene	2.5	ug/l	0.16	0.51	0.5	1		8260	cps	8/27/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/27/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/27/99

Sample Number:	QC Prep Batch Number:	Sample analyzed within	Day(s) from collection.
16290	991839	8/23/99	4
Client ID:	Sample Description:	Collection:	Time:
990823WA09P		8/23/99	
1,1,1,2-Tetrachloroethane	< 0.2 ug/l	0.2	0.64 ns 1
1,1,1-Trichloroethane	0.25 ug/l	0.23	0.73 40 1 J
1,1,2,2-Tetrachloroethane	< 0.29 ug/l	0.29	0.92 0.02 1
1,1,2-Trichloroethane	< 0.29 ug/l	0.29	0.92 0.5 1
1,1-Dichloroethane	< 0.15 ug/l	0.15	0.48 85 1
1,1-Dichloroethene	< 0.36 ug/l	0.36	1.1 0.7 1
1,1-Dichloropropene	< 0.49 ug/l	0.49	1.6 ns 1
1,2,3-Trichlorobenzene	< 0.22 ug/l	0.22	0.7 ns 1
1,2,3-Trichloropropane	< 0.6 ug/l	0.6	1.9 ns 1
1,2,4-Trichlorobenzene	< 0.16 ug/l	0.16	0.51 14 1
1,2,4-Trimethylbenzene	< 0.29 ug/l	0.29	0.92 ns 1
1,2-Dibromoethane	< 0.24 ug/l	0.24	0.76 0.005 1
1,2-Dichlorobenzene	< 0.2 ug/l	0.2	0.64 60 1
1,2-Dichloroethane	< 0.19 ug/l	0.19	0.6 0.5 1
1,2-Dichloropropane	< 0.23 ug/l	0.23	0.73 0.5 1
1,3,5-Trimethylbenzene	< 0.23 ug/l	0.23	0.73 ns 1
1,3-Dichlorobenzene	< 0.19 ug/l	0.19	0.6 125 1
1,3-Dichloropropane	< 0.21 ug/l	0.21	0.67 ns 1
1,4-Dichlorobenzene	< 0.15 ug/l	0.15	0.48 15 1
1,2-Dibromo-3-chloropropan	< 0.59 ug/l	0.59	1.9 0.02 1
2,2-Dichloropropane	< 0.4 ug/l	0.4	1.3 ns 1
2-Butanone (MEK)	< 1.4 ug/l	1.4	4.4 90 1
2-Chloroethyl Vinyl Ether	< 0.29 ug/l	0.29	0.92 ns 1
2-Chlorotoluene	< 0.15 ug/l	0.15	0.48 ns 1
4-Chlorotoluene	< 0.25 ug/l	0.25	0.8 ns 1
4-Methyl-2-Pentanone	< 0.84 ug/l	0.84	2.7 50 1
Acetone	< 1.6 ug/l	1.6	4.9 200 1
Benzene	< 0.19 ug/l	0.19	0.6 0.5 1
Bromobenzene	< 0.19 ug/l	0.19	0.6 ns 1
Bromochloromethane	< 0.34 ug/l	0.34	1.1 ns 1
Bromodichloromethane	0.43 ug/l	0.26	0.83 0.06 1 J



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James Chang  
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 2572 Oak St.  
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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/27/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/27/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/27/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/27/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/27/99
Chloroform	2.4	ug/l	0.27	0.86	0.6	1		8260	cps	8/27/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/27/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/27/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/27/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/27/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/27/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/27/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/27/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/27/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/27/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/27/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/27/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/27/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/27/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/27/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/27/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/27/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/27/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/27/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/27/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/27/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/27/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/27/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/27/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/27/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/27/99
Trichloroethene	0.94	ug/l	0.16	0.51	0.5	1		8260	cps	8/27/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/27/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/27/99

Sample Number: 16291

QC Prep Batch Number: 991839

Sample analyzed within 4 Day(s) from collection

Client ID: Trip Blank

Sample Description:

Collection: 8/23/99 Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/27/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	8/27/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	8/27/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/27/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	8/27/99





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 2572 Oak St.  
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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	8/27/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	8/27/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/27/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	8/27/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	8/27/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/27/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	8/27/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	8/27/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/27/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	8/27/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/27/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	8/27/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	8/27/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	8/27/99
1,2-Dibromo-3-chloropropane	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	8/27/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	8/27/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	8/27/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	8/27/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	8/27/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/27/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	8/27/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	8/27/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	8/27/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	8/27/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/27/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	8/27/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	8/27/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	8/27/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	8/27/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	8/27/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	8/27/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	8/27/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	8/27/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	8/27/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	8/27/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	8/27/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	8/27/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	8/27/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	8/27/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	8/27/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	8/27/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	8/27/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	8/27/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990655  
 DATE REPORTED: 30-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	8/27/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	8/27/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	8/27/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	8/27/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	8/27/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	8/27/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	8/27/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	8/27/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	8/27/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	8/27/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	8/27/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	8/27/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	8/27/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	8/27/99
Trichloroethene	< 0.16	ug/l	0.16	0.51	0.5	1		8260	cps	8/27/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	8/27/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	8/27/99

Approved By: 

Date: 8/31/99

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: 990655  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 16284										
Client ID: 990823WA01P										
								Collection: 8/23/99	Time: 15:00	
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/27/99	991835	
Barium - ICAP	0.1	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/27/99	991828	
Cadmium - Furnace AA	<0.7	ug/l	RJ	0.7	2.2	213.2	dmd/rf	8/26/99	991813	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/27/99	991828	
Copper- ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/27/99	991828	
Iron - ICAP	1.1	mg/l	RJ	0.078	0.25	200.7	dmd/rf	8/27/99	991828	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/24/99	991792	
Manganese - ICAP	0.13	mg/l	RJ	0.004	0.01	200.7	dmd/rf	8/27/99	991828	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/26/99	991821	
Nickel - ICAP	0.02	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/27/99	991828	
Selenium - Furnace AA	14	ug/l	J RJ	7.8	25	270.2	dmd/rf	8/27/99	991836	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/27/99	991828	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/24/99	991788	
Zinc - ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/27/99	991828	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/24/99	991858	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	128053	8/30/99	991857	
Cyanide, Total	<0.0077	mg/l		0.008	0.02	335.2	128053	8/30/99	991855	
pH (water)	7.3	s.u.	#			150.1	ag	8/25/99	991800	

Nova Sample Number: 16285  
 Client ID: 990823WA09R

								Collection: 8/23/99	Time: 16:00	
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	8/27/99	991835	
Barium - ICAP	0.02	mg/l	RJ	0.002	0.006	200.7	dmd/rf	8/27/99	991828	
Cadmium - Furnace AA	<0.7	ug/l	RJ	0.7	2.2	213.2	dmd/rf	8/26/99	991813	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	8/27/99	991828	
Copper- ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	8/27/99	991828	
Iron - ICAP	0.13	mg/l	J RJ	0.078	0.25	200.7	dmd/rf	8/27/99	991828	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/24/99	991792	
Manganese - ICAP	0.01	mg/l	J RJ	0.004	0.01	200.7	dmd/rf	8/27/99	991828	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	8/26/99	991821	
Nickel - ICAP	14	ug/l	J RJ	10	32	200.7	dmd/rf	8/27/99	991828	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	8/27/99	991836	



# INORGANIC REPORT

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

WDNR# 241340550  
 INVOICE NUMBER 990655  
 DATE REPORTED: 31-Aug-99  
 DATE RECEIVED: 24-Aug-99  
 SAMPLE TEMP (C) Rec On Ice  
 PROJECT ID:  
 PROJECT NAME:

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	8/27/99	991828	
Thallium - Furnace AA	<4.8	ug/l	RJ	4.8	15	279.2	dmd	8/24/99	991788	
Zinc - ICAP	0.03	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	8/27/99	991828	

Nova Sample Number: 16286  
 Client ID: 990823WA02P

pH (water) 8.9 s.u. # 150.1

Collection: 8/23/99 Time: 15:00  
 Sample Description:

ag 8/25/99 991800

Nova Sample Number: 16287  
 Client ID: 990823WA03P

pH (water) 12 s.u. # 150.1

Collection: 8/23/99 Time: 15:20  
 Sample Description:

ag 8/25/99 991800

Nova Sample Number: 16288  
 Client ID: 990823WA05P

pH (water) 7.2 s.u. # 150.1

Collection: 8/23/99 Time: 15:30  
 Sample Description:

ag 8/25/99 991800

Nova Sample Number: 16290  
 Client ID: 990823WA09P

Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/24/99	991858	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	128053	8/30/99	991857	
Cyanide, Total	<0.0077	mg/l		0.008	0.02	335.2	128053	8/30/99	991855	

Collection: 8/23/99 Time:  
 Sample Description:

Approved By: 

Date: 8/31/99

James Chang, Ph.D., Lab Director

RJ Result expressed as Total.

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 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

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



# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
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Sample Number: 16350      QC Prep Batch Number: 991882      Sample analyzed within 2 Day(s) from collection.

Client ID: 990630WA01P      Sample Description:      Collection: 8/30/99      Time: 14:10

1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	cps	9/1/99
1,1,1-Trichloroethane	298	ug/l	2.3	7.3	40	10		8260	cps	9/1/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	cps	9/1/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	cps	9/1/99
1,1-Dichloroethane	36	ug/l	1.5	4.8	85	10		8260	cps	9/1/99
1,1-Dichloroethene	18	ug/l	3.6	11	0.7	10		8260	cps	9/1/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	cps	9/1/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	cps	9/1/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	cps	9/1/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	cps	9/1/99
1,2,4-Trimethylbenzene	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	9/1/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	cps	9/1/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	cps	9/1/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	9/1/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	cps	9/1/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	cps	9/1/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	cps	9/1/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	cps	9/1/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	cps	9/1/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	cps	9/1/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	cps	9/1/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	cps	9/1/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	cps	9/1/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	cps	9/1/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	cps	9/1/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	cps	9/1/99
Acetone	< 16	ug/l	16	49	200	10		8260	cps	9/1/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	cps	9/1/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	cps	9/1/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	cps	9/1/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	cps	9/1/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	cps	9/1/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	cps	9/1/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	cps	9/1/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	cps	9/1/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	cps	9/1/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	cps	9/1/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	cps	9/1/99
cis-1,2-Dichloroethene	64	ug/l	2	6.4	7	10		8260	cps	9/1/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	cps	9/1/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	cps	9/1/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	cps	9/1/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	cps	9/1/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	cps	9/1/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	cps	9/1/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	cps	9/1/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	cps	9/1/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	cps	9/1/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	cps	9/1/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	cps	9/1/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	cps	9/1/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	cps	9/1/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	cps	9/1/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	cps	9/1/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	cps	9/1/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	cps	9/1/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	cps	9/1/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	cps	9/1/99
Tetrachloroethene	22	ug/l	2.9	9.2	0.5	10		8260	cps	9/1/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	cps	9/1/99
trans-1,2-Dichloroethene	21	ug/l	1.6	5.1	20	10		8260	cps	9/1/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	cps	9/1/99
Trichloroethene	704	ug/l	1.6	5.1	0.5	10		8260	cps	9/1/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	cps	9/1/99
Vinyl chloride	4.5	ug/l	2.1	6.7	0.02	10	J	8260	cps	9/1/99

Sample Number: 16355 QC Prep Batch Number: 991882 Sample analyzed within 2 Day(s) from collection.

Client ID: 990830WA07P Sample Description: Collection: 8/30/99 Time: 14:15

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
1,1,1-Trichloroethane	0.48	ug/l	0.23	0.73	40	1	J	8260	cps	9/1/99
1,1,2,2-Tetrachloroethane	<0.29	ug/l	0.29	0.92	0.02	1		8260	cps	9/1/99
1,1,2-Trichloroethane	<0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
1,1-Dichloroethane	0.26	ug/l	0.15	0.48	85	1	J	8260	cps	9/1/99
1,1-Dichloroethene	<0.36	ug/l	0.36	1.1	0.7	1		8260	cps	9/1/99
1,1-Dichloropropene	<0.49	ug/l	0.49	1.6	ns	1		8260	cps	9/1/99
1,2,3-Trichlorobenzene	<0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
1,2,3-Trichloropropane	2.1	ug/l	0.6	1.9	ns	1		8260	cps	9/1/99
1,2,4-Trichlorobenzene	<0.16	ug/l	0.16	0.51	14	1		8260	cps	9/1/99
1,2,4-Trimethylbenzene	<0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
1,2-Dibromoethane	<0.24	ug/l	0.24	0.76	0.005	1		8260	cps	9/1/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.64	60	1		8260	cps	9/1/99
1,2-Dichloroethane	<0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	9/1/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	9/1/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	9/1/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	9/1/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	9/1/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	9/1/99
2-Butanone (MEK)	5.1	ug/l	1.4	4.4	90	1		8260	cps	9/1/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	9/1/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	9/1/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	9/1/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	9/1/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Bromodichloromethane	0.64	ug/l	0.26	0.83	0.06	1	J	8260	cps	9/1/99
Bromoform	0.49	ug/l	0.47	1.5	0.44	1	J	8260	cps	9/1/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	9/1/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	9/1/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	9/1/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	9/1/99
Chloroform	2.4	ug/l	0.27	0.86	0.6	1		8260	cps	9/1/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	9/1/99
cis-1,2-Dichloroethene	0.45	ug/l	0.2	0.64	7	1	J	8260	cps	9/1/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	9/1/99
Dibromochloromethane	0.73	ug/l	0.21	0.67	6	1		8260	cps	9/1/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	9/1/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	9/1/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	9/1/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	9/1/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	9/1/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	9/1/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	9/1/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	9/1/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	9/1/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	9/1/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	9/1/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	9/1/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	9/1/99



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# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	9/1/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	9/1/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	9/1/99
Trichloroethene	2.2	ug/l	0.16	0.51	0.5	1		8260	cps	9/1/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	9/1/99

Sample Number: 16356      QC Prep Batch Number: 991332      Sample analyzed within 2 Day(s) from collection  
 Client ID: 990830WA09P      Sample Description:      Collection: 8/30/99      Time: 13:40

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	9/1/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	9/1/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	9/1/99
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	9/1/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	9/1/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	9/1/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	9/1/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	9/1/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	9/1/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	9/1/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	9/1/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	9/1/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	9/1/99
1,2-Dibromo-3-chloropropan	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	9/1/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	9/1/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	9/1/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	9/1/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	9/1/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	9/1/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	9/1/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	9/1/99





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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	9/1/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	9/1/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	9/1/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	9/1/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	9/1/99
Chloroform	2.4	ug/l	0.27	0.86	0.6	1		8260	cps	9/1/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	9/1/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	9/1/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	9/1/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	9/1/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	9/1/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	9/1/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	9/1/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	9/1/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	9/1/99
m&p-xylene	0.42	ug/l	0.36	1.1	124	1	J	8260	cps	9/1/99
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	9/1/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	9/1/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	9/1/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	9/1/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	9/1/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	9/1/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	9/1/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
Toluene	0.79	ug/l	0.33	1	68.6	1	J	8260	cps	9/1/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	9/1/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	9/1/99
Trichloroethene	0.45	ug/l	0.16	0.51	0.5	1	J	8260	cps	9/1/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	9/1/99

Sample Number: 16357      QC Prep Batch Number: 991882      Sample analyzed within: 2 Day(s) from collection

Client ID: Trip Blank      Sample Description:      Collection: 8/30/99      Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
1,1,1-Trichloroethane	< 0.23	ug/l	0.23	0.73	40	1		8260	cps	9/1/99
1,1,2,2-Tetrachloroethane	< 0.29	ug/l	0.29	0.92	0.02	1		8260	cps	9/1/99
1,1,2-Trichloroethane	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
1,1-Dichloroethane	< 0.15	ug/l	0.15	0.48	85	1		8260	cps	9/1/99



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## ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
DATE REPORTED: 13-Sep-99  
DATE RECEIVED: 30-Aug-99  
SAMPLE TEMP (C): Rec On Ice  
PROJECT ID: Weekly Sampling  
PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,1-Dichloroethene	< 0.36	ug/l	0.36	1.1	0.7	1		8260	cps	9/1/99
1,1-Dichloropropene	< 0.49	ug/l	0.49	1.6	ns	1		8260	cps	9/1/99
1,2,3-Trichlorobenzene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	cps	9/1/99
1,2,4-Trichlorobenzene	< 0.16	ug/l	0.16	0.51	14	1		8260	cps	9/1/99
1,2,4-Trimethylbenzene	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
1,2-Dibromoethane	< 0.24	ug/l	0.24	0.76	0.005	1		8260	cps	9/1/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.64	60	1		8260	cps	9/1/99
1,2-Dichloroethane	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99
1,2-Dichloropropane	< 0.23	ug/l	0.23	0.73	0.5	1		8260	cps	9/1/99
1,3,5-Trimethylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
1,3-Dichlorobenzene	< 0.19	ug/l	0.19	0.6	125	1		8260	cps	9/1/99
1,3-Dichloropropane	< 0.21	ug/l	0.21	0.67	ns	1		8260	cps	9/1/99
1,4-Dichlorobenzene	< 0.15	ug/l	0.15	0.48	15	1		8260	cps	9/1/99
1,2-Dibromo-3-chloropropane	< 0.59	ug/l	0.59	1.9	0.02	1		8260	cps	9/1/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	cps	9/1/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	cps	9/1/99
2-Chloroethyl Vinyl Ether	< 0.29	ug/l	0.29	0.92	ns	1		8260	cps	9/1/99
2-Chlorotoluene	< 0.15	ug/l	0.15	0.48	ns	1		8260	cps	9/1/99
4-Chlorotoluene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
4-Methyl-2-Pentanone	< 0.84	ug/l	0.84	2.7	50	1		8260	cps	9/1/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	cps	9/1/99
Benzene	< 0.19	ug/l	0.19	0.6	0.5	1		8260	cps	9/1/99
Bromobenzene	< 0.19	ug/l	0.19	0.6	ns	1		8260	cps	9/1/99
Bromochloromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Bromodichloromethane	< 0.26	ug/l	0.26	0.83	0.06	1		8260	cps	9/1/99
Bromoform	< 0.47	ug/l	0.47	1.5	0.44	1		8260	cps	9/1/99
Bromomethane	< 0.21	ug/l	0.21	0.67	1	1		8260	cps	9/1/99
Carbon tetrachloride	< 0.22	ug/l	0.22	0.7	0.5	1		8260	cps	9/1/99
Chlorobenzene	< 0.2	ug/l	0.2	0.64	20	1		8260	cps	9/1/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	cps	9/1/99
Chloroform	< 0.27	ug/l	0.27	0.86	0.6	1		8260	cps	9/1/99
Chloromethane	< 0.77	ug/l	0.77	2.4	0.3	1		8260	cps	9/1/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.64	7	1		8260	cps	9/1/99
cis-1,3-Dichloropropene	< 0.24	ug/l	0.24	0.76	0.02	1		8260	cps	9/1/99
Dibromochloromethane	< 0.21	ug/l	0.21	0.67	6	1		8260	cps	9/1/99
Dibromomethane	< 0.35	ug/l	0.35	1.1	ns	1		8260	cps	9/1/99
Dichlorodifluoromethane	< 0.36	ug/l	0.36	1.1	200	1		8260	cps	9/1/99
Ethylbenzene	< 0.16	ug/l	0.16	0.51	140	1		8260	cps	9/1/99
Hexachlorobutadiene	< 0.22	ug/l	0.22	0.7	ns	1		8260	cps	9/1/99
Isopropyl Ether	< 0.32	ug/l	0.32	1	ns	1		8260	cps	9/1/99
Isopropylbenzene	< 0.16	ug/l	0.16	0.51	ns	1		8260	cps	9/1/99
m&p-xylene	< 0.36	ug/l	0.36	1.1	124	1		8260	cps	9/1/99



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

# ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Sampling  
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	< 0.21	ug/l	0.21	0.67	12	1		8260	cps	9/1/99
Methylene chloride	< 0.76	ug/l	0.76	2.4	0.5	1		8260	cps	9/1/99
n-Butylbenzene	< 0.23	ug/l	0.23	0.73	ns	1		8260	cps	9/1/99
n-Propylbenzene	< 0.25	ug/l	0.25	0.8	ns	1		8260	cps	9/1/99
Naphthalene	< 0.46	ug/l	0.46	1.5	8	1		8260	cps	9/1/99
o-xylene	< 0.18	ug/l	0.18	0.57	124	1		8260	cps	9/1/99
p-Isopropyltoluene	< 0.18	ug/l	0.18	0.57	ns	1		8260	cps	9/1/99
sec-Butylbenzene	< 0.3	ug/l	0.3	0.95	ns	1		8260	cps	9/1/99
Styrene	< 0.21	ug/l	0.21	0.67	10	1		8260	cps	9/1/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.64	ns	1		8260	cps	9/1/99
Tetrachloroethene	< 0.29	ug/l	0.29	0.92	0.5	1		8260	cps	9/1/99
Toluene	< 0.33	ug/l	0.33	1	68.6	1		8260	cps	9/1/99
trans-1,2-Dichloroethene	< 0.16	ug/l	0.16	0.51	20	1		8260	cps	9/1/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.64	0.02	1		8260	cps	9/1/99
Trichloroethene	0.96	ug/l	0.16	0.51	0.5	1		8260	cps	9/1/99
Trichlorofluoromethane	< 0.34	ug/l	0.34	1.1	ns	1		8260	cps	9/1/99
Vinyl chloride	< 0.21	ug/l	0.21	0.67	0.02	1		8260	cps	9/1/99

Approved By: 

James Chang, Ph.D., Lab Director

Date: 9/13/99

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 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C) Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 16350										
Client ID: 990630WA01P										
							Collection: 8/30/99	Time: 14:10		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	9/1/99	991871	
Barium - ICAP	0.11	mg/l	RJ	0.002	0.006	200.7	dmd/rf	9/1/99	991868	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/31/99	991854	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	9/1/99	991868	
Copper - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	9/1/99	991868	
Iron - ICAP	0.9	mg/l	RJ	0.078	0.25	200.7	dmd/rf	9/1/99	991868	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/31/99	991852	
Manganese - ICAP	0.18	mg/l	RJ	0.004	0.01	200.7	dmd/rf	9/1/99	991868	
Mercury CV	0.0003	mg/l	J RJ	0.0002	0.0006	245.1	dmd/mp	9/2/99	991890	
Nickel - ICAP	0.04	mg/l	RJ	0.01	0.03	200.7	dmd/rf	9/1/99	991868	
Selenium - Furnace AA	18	ug/l	J RJ	7.8	25	270.2	dmd/rf	9/1/99	991869	
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	9/1/99	991868	
Thallium - Furnace AA	<4.8	ug/l		4.8	15	279.2	dmd/rf	8/31/99	991861	
Zinc - ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	9/1/99	991868	
Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/31/99	991928	
Cyanide, Amenable	<0.0077	mg/l		0.008	0.02	335.2	128053	9/8/99	991927	
Cyanide, Total	<0.0077	mg/l		0.008	0.02	335.2	128053	9/8/99	991926	
pH (water)	7.1	s.u.	#			150.1	sh	9/1/99	991866	

Nova Sample Number: 16351  
 Client ID: 990630WA09R

Collection: 8/30/99

Time: 13:45

Sample Description:

Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd/rf	9/1/99	991871	
Barium - ICAP	0.02	mg/l	RJ	0.002	0.006	200.7	dmd/rf	9/1/99	991868	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd/rf	8/31/99	991854	
Chromium, Total - ICAP	<0.012	mg/l	RJ	0.012	0.04	200.7	dmd/rf	9/1/99	991868	
Copper - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd/rf	9/1/99	991868	
Iron - ICAP	0.14	mg/l	J RJ	0.078	0.25	200.7	dmd/rf	9/1/99	991868	
Lead - Furnace AA	<1.4	ug/l	RJ	1.4	4.5	239.2	dmd/rf	8/31/99	991852	
Manganese - ICAP	0.01	mg/l	J RJ	0.004	0.01	200.7	dmd/rf	9/1/99	991868	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd/mp	9/2/99	991890	
Nickel - ICAP	15	ug/l	J RJ	10	32	200.7	dmd/rf	9/1/99	991868	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd/rf	9/1/99	991869	



# INORGANIC REPORT

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

WDNR# 241340550  
 INVOICE NUMBER: 990672  
 DATE REPORTED: 13-Sep-99  
 DATE RECEIVED: 30-Aug-99  
 SAMPLE TEMP (C): Rec On Ice  
 PROJECT ID: Weekly Samplin  
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd/rf	9/1/99	991868	
Thallium - Furnace AA	<4.8	ug/l		4.8	15	279.2	dmd/rf	8/31/99	991861	
Zinc - ICAP	0.01	mg/l	J RJ	0.01	0.03	200.7	dmd/rf	9/1/99	991868	

Nova Sample Number: 16352  
 Client ID: 990830WA02P

Collection: 8/30/99 Time: 14:20

Sample Description:

pH (water)	9.5	s.u.	#	150.1	sh	9/1/99	991866
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Nova Sample Number: 16353  
 Client ID: 990830WA03P

Collection: 8/30/99 Time: 14:22

Sample Description:

pH (water)	11	s.u.	#	150.1	sh	9/1/99	991866
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Nova Sample Number: 16354  
 Client ID: 990830WA05P

Collection: 8/30/99 Time: 14:05

Sample Description:

pH (water)	7.4	s.u.	#	150.1	sh	9/1/99	991866
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Nova Sample Number: 16356  
 Client ID: 990830WA09P

Collection: 8/30/99 Time: 13:40

Sample Description:

Chromium, Hexavalent	<0.0042	mg/l		0.004	0.01	SM 3500	128053	8/31/99	991928
Cyanide, Amenable	<0.0077	mg/l		0.018	0.06	335.2	128053	9/8/99	991927
Cyanide, Total	<0.0077	mg/l		0.006	0.02	335.2	128053	9/8/99	991926
pH (water)	8.1	s.u.	#	150.1			sh	9/1/99	991866

Approved By: 

James Chang, Ph.D., Lab Director

Date: 9/13/99

**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 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

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.