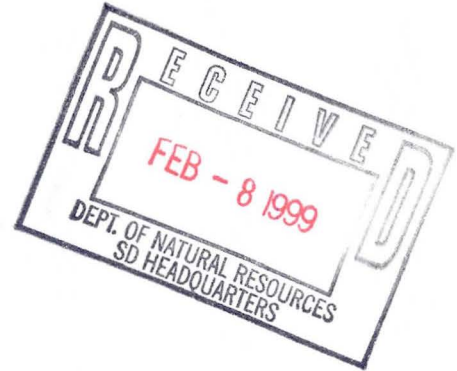




February 15, 1999

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

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

Sincerely,

Dean Groleau
Dean Groleau, Plant Superintendent
APL, Inc.

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

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

ASHIPPUN, WISCONSIN 53003

Prepared for:

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

Prepared by:

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

February 15, 1999

1.0 Introduction

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

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

1.1 Site Background Review

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

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

1.2 Project Objectives

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

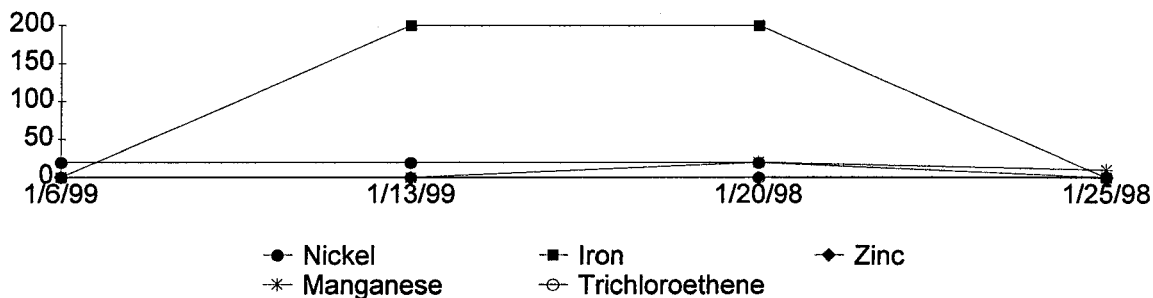
1.3 Effluent Monitoring

Weekly monitoring was conducted on January 6, 13, 20, and 25. The weekly samples for January were tested by APL, Inc. The results of the effluent monitoring tests for the samples taken on January 6, 13, & 20 showed that Trichloroethene and Nickel equaled the limit of the WDNR effluent discharge permit. The results of the effluent monitoring tests for the samples taken on January 25 showed that Trichloroethene exceeded the limit of the WDNR effluent discharge permit. Paul Kozol of the WDNR authorized continuation of plant operation because the exceedence of Trichloroethene (0.8ug/l) is close to the laboratory's limit of detection (0.2ug/l) and the spent carbon is scheduled to be changed out in the near future. The possible causes of the high levels and exceedence are discussed in Section 2.0.

1.4 Monitoring Results

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

Chart 1 - 5 Important Indicator Parameters



2.0 Plant Permit Exceedences

The possible cause for high level for TCE and VOCs in the January samplings was due to the blower duct on the Diffused Air Stripper had a tear in it. The tear was discovered on December 26 and a PVC replacement was ordered. The PVC replacement duct was received and installed on December 30. The blower’s output went from 15 to 40 + inches of water column after the new blower duct was installed. Operating the Treatment Plant while having the tear in the DAS-500 blower duct resulted in a shorter life span of the Granulated Activated Carbon Filters (GAC-650/651).

The possible cause for high level for Metals in the January samplings may be due to the daily backwashing of the Tertiary Filtration System (TF-600) that requires temporarily by-passing it during the Manual effluent backwashing. The operators attempt to reduce this by-passing time by pumping the Clarifier (C-400) to the Sludge Holding Tank (ST-820) and cleaning it out at the same time as the backwashing of TF-600. Some flow past TF-600 is unavoidable with out shutting down the plant on a daily basis. Another possible source of Metals is the evident deterioration of the metal piping after the Sulfuric Acid Static Mixer to the NPDES Monitor Station.

During January, the Treatment Plant had problems that were due to the “Blizzard of 1999.” On January 2, the operator on duty was unable to drive to the Treatment Plant due to 20+ inches of snowfall. This led to too much sludge build-up in the Clarifier (C-400) which flowed into the Tertiary Filter (TF-600) that plugged the media and dumped all of the treated water into the Floor Trench Sump. The water was pumped back into the Equalization Tank (EQT-100) for retreatment. This filled up the EQT-100 and shut down the Extraction Well Field (EW’s). While the EW’s were shut down, 2 of the 5 pump-lines froze up from the sub-zero temperatures. The

Treatment Plant building was found flooded but still operating upon the arrival of the Sunday operator on January 3. The operator called in the Saturday operator to assist him and, together, they managed to get rid of the excess treated water. The operators are instructed to perform a daily effluent backwash on TF-600 and at the same time to transfer C-400 to the Sludge Holding Tank (ST-820). This procedure has been in affect since the new media had been put into TF-600. This has been the first time that it was not followed and it resulted in 2 EW's freezing up, a 4 week plugging of TF-600, and the flooding of the Treatment Plant building. All water was contained in the building but there is the possibility that the water could flow out of the building because there is not a fail-safe that would shut down the Treatment System Feed Pumps when the Floor Trench Sump reaches its HIGH-HIGH Level Alarm.

On January 11, Paul Kozol, of the WDNR, authorized the by-passing of TF-600 during the time that the Treatment Plant was unmanned because of the media binding due to the January 2 incident. The TF-600 plugged up shortly after the operators had left the Treatment Plant at the end of the work day. This resulted in most of the treated water returning to the EQT-100 and filling it. When the EQT-100 reaches 90% full, the Extraction Well pumps were shut down. During the Blizzard of 1999 Arctic Cold spell, 2 of the 5 Extraction Well pipelines froze up. An electrician was called in to install temporary outlets so that space heaters could be placed at the well heads to assist in thawing them out. The Heat Trace System did not provide enough heat to prevent the pipelines from freezing. This may be due to inadequate or damp insulation. The Treatment Plant was operated in this "batch feed mode" during the cold spell to prevent the EQT-100 from reaching 90% full and to keep the Extraction Wells operating. All 5 Extraction Wells were functioning and the cold spell ended on January 18 but the problem with TF-600 persisted until January 30.

2.1 Treatment Plant Shut Downs

The Treatment Plant was shut down ten times for a total of 44.75 hours in January, 1999. There was one shut down due to the Treatment Plant flooding. There was one shut down due to the Treatment System Feed Pump (TFP-110) failing. There were 4 shut downs due to the low Equalization Tank (EQT-100) level caused from by-passing the Tertiary Filtration System (TF-600) during the cold spell. There was one shut down due to a clogged discharge line from the Cyanide Reduction Tank (CRT-211). There were 2 shut downs due to the Air Stripper Transfer Pumps (TP-520/521) failing. There was one shut down due to the Tertiary Filtration Tank (TFT-601) over-filling. Table 1 shows the summary of the plant down time for the month of January, 1999.

Table 1 - Plant Down Time Summary

Date(s)	Number Hours Shut Down	Reason
1/3	2.5	Plant Was Flooded
1/7	3	TFP-110 Failure
1/12	4	Low EQT-100 Level
1/13	3	TP-520 Failure
1/16	6.5	Low EQT-100 Level
1/17	6	Low EQT-100 Level
1/18	0.5	High TFT-601 Level
1/20	7.5	Low EQT-100 Level
1/21-22	11	TP-521 Failure
1/27	0.75	Clogged CRT-211 Discharge Line
TOTAL	44.75	

2.1.1. Shut Down Due To Treatment Plant Flooding

On January 2, the operator on duty was unable to drive to the Treatment Plant due to 20+ inches of snowfall. The Treatment Plant building was found flooded but still operating upon the arrival of the Sunday operator on January 3. The operator called in the Saturday operator to assist him and, together, they managed to get rid of the excess treated water. The Treatment Plant was shut down from 11A.M. to 1:30P.M. while the operators were trying to pump the water from the Equalization Tank (EQT-100) to the Sludge Holding Tank (ST-820). Total Treatment Plant down time was 2.5 hours.

2.1.2. Shut Down Due To Treatment System Feed Pump Failing

On January 7, the Treatment Plant was discovered shut down upon the arrival of the operator. The Treatment Plant had shut down at 4:30A.M. due to the failure of the Treatment System Feed Pump (TFP-110). TFP-110 was rotated out of line and TFP-111 was activated at 7:30A.M. Total Treatment Plant down time was 3 hours. TFP-110 was dismantled, inspected, and cleaned with a dilute inhibited Muriatic acid solution. The pump's failure was due to the hardness/sludge build-up on it's impeller. The impeller was lubricated and the pump was reassembled, and put in the stand-by position.

2.1.3. Shut Downs Due To Low Equalization Tank Level

On January 12, 16, 17, and 20, the Treatment Plant had shut down due to operating the system in a “batch feed mode.” The Tertiary Filter (TF-600) was by-passed during the cold spell to allow the Extraction Well Pumps to continue operating and prevent their pipelines from freezing. The TF-600 media was plugged with sludge and polymer due to not being able to do a Manual effluent backwash or cleaning of the Clarifier (C-400). This procedure was authorized by Paul Kozol of the WDNR. The total Treatment Plant down time was 24 hours.

2.1.4. Shut Down Due To Clogged CRT-211 Discharge Line

On January 26, the first and second stages of the Metals Package (CRT-201 & 211) started over-flowing onto the floor. They were by-passed. Plans were made for a shut down for the next morning and equipment was obtained for the clean out process.

On January 27, the Treatment Plant was shut down and the CRT-211 discharge line elbow was removed and cleaned. The discharge line piping was jetted out with a water hose. The CRT-211 discharge line elbow was re-installed and the Treatment Plant was restarted. The flow from CRT-211 returned to normal. Total Treatment Plant down time was .75 hour.

2.1.5. Shut Downs Due To Air Stripper Transfer Pumps Failing

On January 13, the Treatment Plant was discovered shut down upon the arrival of the operator. The Treatment Plant had shut down at 4:00A.M. due to the failure of the Air Stripper Transfer Pump (TP-520). TP-520 was rotated out of line and TP-521 was activated at 7:00A.M. Total Treatment Plant down time was 3 hours. TP-520 was dismantled, inspected, and cleaned with a dilute inhibited Muriatic acid solution. The pump’s failure was due to the hardness/sludge build-up on it’s impeller. The impeller was lubricated and the pump was reassembled, and put in the stand-by position.

On January 21 to 22, the Treatment Plant was discovered shut down upon the arrival of the operator. The Treatment Plant had shut down at 8:00P.M. due to the failure of the Air Stripper Transfer Pump (TP-521). TP-521 was rotated out of line and TP-520 was activated at 6:45A.M. TP-521 was dismantled, inspected, and cleaned with a dilute inhibited Muriatic acid solution. The pump’s failure was due to the hardness/sludge build-up on it’s impeller. The impeller was lubricated and the pump was reassembled, and put in the stand-by position.

2.1.6. Shut Down Due To Tertiary Filter Tank Over-Filling

On January 18, the Treatment Plant flow had been increased from 29GPM to 34GPM. The Treatment Plant flow increase was too much for the Diffused Air Stripper (DAS-500) to handle. This caused the Tertiary Filter Tank (TFT-601) to over-fill and shut down the Treatment Plant. After the DAS-500 and TFT-601 levels returned to normal, the Treatment Plant was restarted and the flow was reduced to 30GPM. Total Treatment Plant down time was .5 hour.

4.0 Summary

Groundwater treatment plant effluent monitoring was conducted on January 6, 13, 20, and 25 of 1999. The laboratory results of these samples show that all contaminants listed in the Requirements of the Oconomowoc Electroplating Superfund Site Substantive WPDES Permit Requirements Summary (9/96) comply with the permit except for TCE on January 25. See Chart 1, Section 1.4 for important indicator parameters.

During the month of January, 1999, the plant was shut down ten times for a total of 44.75 hours. See Table 1, Section 2.1 for shut down times. All equipment operation and maintenance related issues are detailed in a separate report, entitled "*Monthly Operation and Maintenance Report for the Oconomowoc Electroplating Groundwater Treatment Facility*". That report will be submitted by February 15, 1999.

OCONOMOWOC GROUNDWATER TREATMENT PLANT

Weekly Sampling Results

Date: 1-6-99

Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.1	11	N/A	N/A	NT	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	100	NT	NT	NT	10	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	ND	Monitor
Iron	300	NT	NT	NT	ND	Monitor
Lead	1.9	NT	NT	NT	ND	1.5
Manganese	300	NT	NT	NT	ND	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	90	NT	NT	NT	20	20
Selenium	8.9	NT	NT	NT	ND	10
Silver	9	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	ND	NT	NT	NT	ND	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-dichloroethane	42	NT	NT	NT	1.5	85
1,2-dichloroethane	ND	NT	NT	NT	ND	0.5
1,1-dichloroethene	7.9	NT	NT	NT	ND	0.7
1,2-dichloroethene cis	45	NT	NT	NT	0.4	7
1,2-dichloroethene trans	3.8	NT	NT	NT	ND	20
Ethylbenzene	ND	NT	NT	NT	ND	140
Methylene Chloride	ND	NT	NT	NT	ND	0.5
Tetrachloroethene	ND	NT	NT	NT	ND	0.5
Toluene	ND	NT	NT	NT	ND	68
1,1,1-trichloroethane	88	NT	NT	NT	2	40
1,1,2-trichloroethane	ND	NT	NT	NT	ND	0.5
TCE	360	NT	NT	NT	0.5	0.5
Vinyl Chloride	ND	NT	NT	NT	ND	0.2
Xylene Total	ND	NT	NT	NT	ND	124
COD	NT	NT	NT	NT	NT	Monitor
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

All Effluent Samples Were Grab Samples Authorized By Paul Kozol, WDNR.
The Grab Samples Were Determined To Be Representative Of Operations For The Short Term.

OCONOMOWOC GROUNDWATER TREATMENT PLANT

Weekly Sampling Results

Date: 1-13-99

Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.4	11	N/A	N/A	NT	Monitor
TSS	3.5	NT	NT	NT	ND	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	100	NT	NT	NT	30	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	10	NT	NT	NT	9	Monitor
Iron	1200	NT	NT	NT	200	Monitor
Lead	5.8	NT	NT	NT	ND	1.5
Manganese	100	NT	NT	NT	ND	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	30	NT	NT	NT	20	20
Selenium	13	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	ND	NT	NT	NT	ND	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-dichloroethane	37	NT	ND	NT	ND	85
1,2-dichloroethane	ND	NT	ND	NT	ND	0.5
1,1-dichloroethene	6.6	NT	ND	NT	ND	0.7
1,2-dichloroethene cis	49	NT	ND	NT	0.3	7
1,2-dichloroethene trans	2.8	NT	ND	NT	ND	20
Ethylbenzene	ND	NT	ND	NT	ND	140
Methylene Chloride	ND	NT	ND	NT	ND	0.5
Tetrachloroethene	ND	NT	ND	NT	ND	0.5
Toluene	ND	NT	ND	NT	ND	68
1,1,1-trichloroethane	74	NT	ND	NT	1.3	40
1,1,2-trichloroethane	ND	NT	ND	NT	ND	0.5
TCE	353	NT	0.7	NT	0.5	0.5
Vinyl Chloride	ND	NT	ND	NT	ND	0.2
Xylene Total	ND	NT	ND	NT	ND	124
COD	11	NT	NT	NT	10	Monitor
Phosphorus total	NT	NT	NT	NT	0.05	Monitor
Nitrate + Nitrite	NT	NT	NT	NT	0.13	Monitor
Ammonia Nitrogen	NT	NT	NT	NT	2.4	Monitor

mg/l

mg/l

mg/l

mg/l

mg/l

OCONOMOWOC GROUNDWATER TREATMENT PLANT

Weekly Sampling Results

Date: 1-20-99

Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.5	11	N/A	N/A	8.1	Monitor
TSS	NT	NT	NT	NT	NT	Monitor
Arsenic	ND	NT	NT	NT	ND	5
Barium	100	NT	NT	NT	100	400
Cadmium	ND	NT	NT	NT	ND	0.5
Cadmium Total Recoverable	ND	NT	NT	NT	ND	Monitor
Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	ND	NT	NT	NT	ND	Monitor
Iron	800	NT	NT	NT	200	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	100	NT	NT	NT	20	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	20	NT	NT	NT	20	20
Selenium	ND	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	ND	NT	NT	NT	ND	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-dichloroethane	41	NT	NT	NT	ND	85
1,2-dichloroethane	ND	NT	NT	NT	ND	0.5
1,1-dichloroethene	7.6	NT	NT	NT	ND	0.7
1,2-dichloroethene cis	55	NT	NT	NT	ND	7
1,2-dichloroethene trans	4.7	NT	NT	NT	ND	20
Ethylbenzene	2.4	NT	NT	NT	ND	140
Methylene Chloride	ND	NT	NT	NT	ND	0.5
Tetrachloroethene	ND	NT	NT	NT	ND	0.5
Toluene	7.5	NT	NT	NT	ND	68
1,1,1-trichloroethane	75	NT	NT	NT	1.1	40
1,1,2-trichloroethane	ND	NT	NT	NT	ND	0.5
TCE	360	NT	NT	NT	0.5	0.5
Vinyl Chloride	ND	NT	NT	NT	ND	0.2
Xylene Total	8	NT	NT	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: 1-25-99

Parameter	Influent	After Metals Package	After Stripper	Between Carbon Filters	Effluent	WDNR Site Permit ug/l
pH	7.1	11.2	N/A	N/A	8.4	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 Recoverable	ND	NT	NT	NT	ND	Monitor
Chromium +6	ND	NT	NT	NT	ND	Monitor
Chromium Total	ND	NT	NT	NT	ND	10
Copper	ND	NT	NT	NT	ND	Monitor
Iron	600	NT	NT	NT	ND	Monitor
Lead	ND	NT	NT	NT	ND	1.5
Manganese	200	NT	NT	NT	10	Monitor
Mercury	ND	NT	NT	NT	ND	0.2
Nickel	40	NT	NT	NT	ND	20
Selenium	ND	NT	NT	NT	ND	10
Silver	ND	NT	NT	NT	ND	10
Thallium	ND	NT	NT	NT	ND	0.4
Zinc	ND	NT	NT	NT	ND	Monitor
Cyanide	ND	NT	NT	NT	ND	40
Cyanide Free	ND	NT	NT	NT	ND	Monitor
1,1-dichloroethane	36	NT	NT	NT	ND	85
1,2-dichloroethane	ND	NT	NT	NT	ND	0.5
1,1-dichloroethene	19	NT	NT	NT	ND	0.7
1,2-dichloroethene cis	64	NT	NT	NT	0.4	7
1,2-dichloroethene trans	19	NT	NT	NT	ND	20
Ethylbenzene	ND	NT	NT	NT	ND	140
Methylene Chloride	ND	NT	NT	NT	ND	0.5
Tetrachloroethene	11	NT	NT	NT	ND	0.5
Toluene	8.7	NT	NT	NT	ND	68
1,1,1-trichloroethane	309	NT	NT	NT	1.1	40
1,1,2-trichloroethane	ND	NT	NT	NT	ND	0.5
TCE	792	NT	NT	NT	0.8	0.5
Vinyl Chloride	ND	NT	NT	NT	ND	0.2
Xylene Total	ND	NT	NT	NT	ND	124
COD	NT	NT	NT	NT	NT	Monitor
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

FLOW FROM EXTRACTION WELLS

YEAR: 1999				
MONTH: JAN.	FE-100 FLOW	TOTAL DAY'S	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)	MGD	
1	1,128,292.25	13,802.44	0.014	
2	1,142,094.69	13,802.44	0.014	
3	1,155,897.13	12,277.62	0.012	SHUT DOWN
4	1,168,174.75	12,136.14	0.012	
5	1,180,310.89	14,387.74	0.014	
6	1,194,698.63	14,471.00	0.014	
7	1,209,169.63	14,614.12	0.015	SHUT DOWN
8	1,223,783.75	16,524.75	0.017	
9	1,240,308.50	18,813.38	0.019	
10	1,259,121.88	23,219.12	0.023	
11	1,282,341.00	17,432.00	0.017	
12	1,299,773.00	25,125.75	0.025	SHUT DOWN
13	1,324,898.75	22,721.00	0.023	SHUT DOWN
14	1,347,619.75	22,652.50	0.023	
15	1,370,272.25	15,220.38	0.015	
16	1,385,492.63	24,426.25	0.024	SHUT DOWN
17	1,409,918.88	24,164.12	0.024	SHUT DOWN
18	1,434,083.00	20,805.63	0.021	SHUT DOWN
19	1,454,888.63	26,974.25	0.027	
20	1,481,862.88	25,462.00	0.025	SHUT DOWN
21	1,507,324.88	14,458.37	0.014	SHUT DOWN
22	1,521,783.25	21,378.13	0.021	
23	1,543,161.38	28,911.50	0.029	
24	1,572,072.88	24,603.87	0.025	
25	1,596,676.75	23,030.00	0.023	
26	1,619,706.75	26,791.75	0.027	
27	1,646,498.50	25,551.75	0.026	SHUT DOWN
28	1,672,050.25	25,662.25	0.026	
29	1,697,712.50	15,835.75	0.016	
30	1,713,548.25	27,265.00	0.027	
31	1,740,813.25	27,004.75	0.027	
FEB. 1	1,767,818.00			
TOTAL			0.640	
AVERAGE			0.021	

FLOW FROM EQT-100

YEAR: 1999				
MONTH: JAN.	FE-112 FLOW	TOTAL DAY'S	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)	MGD	
1	5,450,911.00	43,553.00	0.044	
2	5,494,464.00	43,553.00	0.044	
3	5,538,017.00	41,752.50	0.042	SHUT DOWN
4	5,579,769.50	44,101.50	0.044	
5	5,623,871.00	44,303.00	0.044	
6	5,668,174.00	30,925.50	0.031	
7	5,699,099.50	27,233.00	0.027	SHUT DOWN
8	5,726,332.50	27,313.00	0.027	
9	5,753,645.50	52,008.50	0.052	
10	5,805,654.00	44,929.00	0.045	
11	5,850,583.00	25,122.00	0.025	
12	5,875,705.00	41,920.50	0.042	SHUT DOWN
13	5,917,625.50	43,576.00	0.044	SHUT DOWN
14	5,961,201.50	43,367.50	0.043	
15	6,004,569.00	28,331.00	0.028	
16	6,032,900.00	34,684.50	0.035	SHUT DOWN
17	6,067,584.50	34,577.50	0.035	SHUT DOWN
18	6,102,162.00	39,403.50	0.039	SHUT DOWN
19	6,141,565.50	32,324.00	0.032	
20	6,173,889.50	53,778.00	0.054	SHUT DOWN
21	6,227,667.50	20,809.50	0.021	SHUT DOWN
22	6,248,477.00	34,886.50	0.035	
23	6,283,363.50	45,331.00	0.045	
24	6,328,694.50	37,886.50	0.038	
25	6,366,581.00	44,525.50	0.045	
26	6,411,106.50	42,494.00	0.042	
27	6,453,600.50	42,821.50	0.043	SHUT DOWN
28	6,496,422.00	42,676.00	0.043	
29	6,539,098.00	33,781.00	0.034	
30	6,572,879.00	46,148.00	0.046	
31	6,619,027.00	34,511.00	0.035	
FEB. 1	6,653,538.00			
TOTAL			1.203	
AVERAGE			0.039	

EFFLUENT FLOW FROM PLANT

YEAR: 1999					
MONTH: JAN.	NPDES STATION	TOTAL DAY'S	X2	DAILY FLOW	
DAY	TOTALIZER	FLOW (GAL.)		MGD	
1	1,321,547.50	4,663.07	9,326.14	0.009	
2	1,326,210.57	4,663.06	9,326.12	0.009	
3	1,330,873.63	10,792.50	21,585.00	0.022	SHUT DOWN
4	1,341,666.13	9,686.12	19,372.24	0.019	
5	1,351,352.25	8,229.50	16,459.00	0.016	
6	1,359,581.75	0.00	0.00	0.016	*
7	1,359,581.75	102.75	205.50	0.016	*SHUT DOWN
8	1,359,684.50	6,596.63	13,193.26	0.013	
9	1,366,281.13	5,403.00	10,806.00	0.011	
10	1,371,684.13	16,930.12	33,860.24	0.034	
11	1,388,614.25	10,798.63	21,597.26	0.022	
12	1,399,412.88	13,646.12	27,292.24	0.027	SHUT DOWN
13	1,413,059.00	7,187.50	14,375.00	0.014	SHUT DOWN
14	1,420,246.50	14,909.50	29,819.00	0.030	
15	1,435,156.00	18,697.63	37,395.26	0.037	
16	1,453,853.63	15,010.12	30,020.24	0.030	SHUT DOWN
17	1,468,863.75	13,936.75	27,873.50	0.028	SHUT DOWN
18	1,482,800.50	15,010.50	30,021.00	0.030	SHUT DOWN
19	1,497,811.00	14,571.68	29,143.36	0.029	
20	1,512,382.68	8,628.82	17,257.64	0.017	SHUT DOWN
21	1,521,011.50	7,987.78	15,975.56	0.016	SHUT DOWN
22	1,528,999.28	15,760.85	31,521.70	0.032	
23	1,544,760.13	21,395.62	42,791.24	0.043	
24	1,566,155.75	17,479.88	34,959.76	0.035	
25	1,583,635.63	15,019.50	30,039.00	0.030	
26	1,598,655.13	14,399.25	28,798.50	0.029	
27	1,613,054.38	16,958.75	33,917.50	0.034	SHUT DOWN
28	1,630,013.13	15,174.25	30,348.50	0.030	
29	1,645,187.38	9,030.50	18,061.00	0.018	
30	1,654,217.88	14,455.25	28,910.50	0.029	
31	1,668,673.13	12,845.00	25,690.00	0.026	
FEB. 1	1,681,518.13				

TOTAL 0.814
AVERAGE 0.026

ON JANUARY 6--8, 1999, THE EFFLUENT DISCHARGE MODE WAS SWITCHED TO THE EFFLUENT TRANSFER PUMP (ETP-710). THE EFFLUENT TOTALIZER DID NOT ACTIVATE IN THIS MODE.

*THIS NUMBER WAS ESTIMATED FROM THE AVERAGE FLOW OF 3 DAYS PRIOR AND 2 DAYS AFTER.

APL Environmental

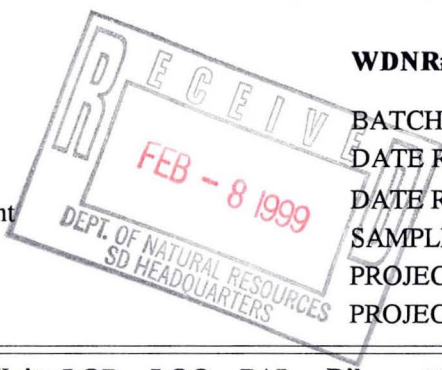
8222 W. Calumet Rd., Milwaukee, WI 53223
 Phone: (414) 355-5800 Fax: (414) 355-3099

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP



Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 13715										
QC Prep Batch Number: 990086										
Sample analyzed within 1 Day(s) from collection.										
Client ID: 990113WA01P Sample Description: Collection: 1/13/99 Time: 14:20										
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	srh	1/14/99
1,1,1-Trichloroethane	74	ug/l	2.3	7.3	40	10		8260	srh	1/14/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	srh	1/14/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/14/99
1,1-Dichloroethane	37	ug/l	1.5	4.8	85	10		8260	srh	1/14/99
1,1-Dichloroethene	6.6	ug/l	3.6	11	0.7	10	J	8260	srh	1/14/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	srh	1/14/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	srh	1/14/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	srh	1/14/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	srh	1/14/99
1,2,4-Trimethylbenzene	< 2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/14/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	srh	1/14/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	srh	1/14/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	srh	1/14/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	srh	1/14/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/14/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	srh	1/14/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	srh	1/14/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	srh	1/14/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	srh	1/14/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	srh	1/14/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	srh	1/14/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/14/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	srh	1/14/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	srh	1/14/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	srh	1/14/99
Acetone	< 16	ug/l	16	49	200	10		8260	srh	1/14/99
Benzene	< 1.9	ug/l	1.9	6	0.5	10		8260	srh	1/14/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	srh	1/14/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	srh	1/14/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	srh	1/14/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	srh	1/14/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	srh	1/14/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	srh	1/14/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	srh	1/14/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	srh	1/14/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	srh	1/14/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	srh	1/14/99
cis-1,2-Dichloroethene	49	ug/l	2	6.4	7	10		8260	srh	1/14/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	srh	1/14/99

WDNR# 241340550

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

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 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	srh	1/14/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	srh	1/14/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	srh	1/14/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	srh	1/14/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/14/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	srh	1/14/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	srh	1/14/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	srh	1/14/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	srh	1/14/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	srh	1/14/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/14/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/14/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	srh	1/14/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	srh	1/14/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	srh	1/14/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	srh	1/14/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	srh	1/14/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	srh	1/14/99
Tetrachloroethene	<2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/14/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	srh	1/14/99
trans-1,2-Dichloroethene	2.8	ug/l	1.6	5.1	20	10	J	8260	srh	1/14/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	srh	1/14/99
Trichloroethene	353	ug/l	1.6	5.1	0.5	10		8260	srh	1/14/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/14/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	srh	1/14/99

Sample Number: 13720 QC Prep Batch Number: 990086 Sample analyzed within: 1 Day(s) from collection
 Client ID: 990113WA07P Sample Description: Collection: 1/13/99 Time: 14:50

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

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/14/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	1/14/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	1/14/99
1,2-Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/14/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/14/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	1/14/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/14/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/14/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/14/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	1/14/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	1/14/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/14/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/14/99
Bromodichloromethane	0.7	ug/l	0.3	0.8	0.06	1	J	8260	srh	1/14/99
Bromoform	<0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/14/99
Bromomethane	<0.2	ug/l	0.2	0.7	1	1		8260	srh	1/14/99
Carbon tetrachloride	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/14/99
Chlorobenzene	<0.2	ug/l	0.2	0.6	20	1		8260	srh	1/14/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	srh	1/14/99
Chloroform	0.6	ug/l	0.3	0.9	0.6	1	J	8260	srh	1/14/99
Chloromethane	<0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/14/99
cis-1,2-Dichloroethene	<0.2	ug/l	0.2	0.6	7	1		8260	srh	1/14/99
cis-1,3-Dichloropropene	<0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/14/99
Dibromochloromethane	1.3	ug/l	0.2	0.7	6	1		8260	srh	1/14/99
Dibromomethane	<0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/14/99
Dichlorodifluoromethane	<0.4	ug/l	0.4	1.1	200	1		8260	srh	1/14/99
Ethylbenzene	<0.2	ug/l	0.2	0.5	140	1		8260	srh	1/14/99
Hexachlorobutadiene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
Isopropyl Ether	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/14/99
Isopropylbenzene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/14/99
m&p-xylene	<0.4	ug/l	0.4	1.1	124	1		8260	srh	1/14/99
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	1/14/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/14/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/14/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	1/14/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	1/14/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/14/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	1/14/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/14/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	1/14/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	1/14/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/14/99
Trichloroethene	0.7	ug/l	0.2	0.5	0.5	1		8260	srh	1/14/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/14/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/14/99

Sample Number: 13721 QC Prep Batch Number: 990086 Sample analyzed within 1 Day(s) from collection

Client ID: 990113WA09P Sample Description: Collection: 1/13/99 Time: 15:00

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
1,1,1-Trichloroethane	1.3	ug/l	0.2	0.7	40	1		8260	srh	1/14/99
1,1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	1/14/99
1,1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/14/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	1/14/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	1/14/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	1/14/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	1/14/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	1/14/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/14/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	1/14/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	1/14/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/14/99
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/14/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	1/14/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	1/14/99
1,2-Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/14/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/14/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	1/14/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/14/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/14/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/14/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	1/14/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	1/14/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/14/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/14/99
Bromodichloromethane	2.3	ug/l	0.3	0.8	0.06	1		8260	srh	1/14/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/14/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	1/14/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/14/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	1/14/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	1/14/99
Chloroform	7.3	ug/l	0.3	0.9	0.6	1		8260	srh	1/14/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/14/99
cis-1,2-Dichloroethene	0.3	ug/l	0.2	0.6	7	1	J	8260	srh	1/14/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/14/99
Dibromochloromethane	0.9	ug/l	0.2	0.7	6	1		8260	srh	1/14/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/14/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	1/14/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	1/14/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/14/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/14/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	1/14/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	1/14/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/14/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/14/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	1/14/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	1/14/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/14/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	1/14/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/14/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	1/14/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	1/14/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/14/99
Trichloroethene	0.5	ug/l	0.2	0.5	0.5	1	J	8260	srh	1/14/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/14/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/14/99

Sample Number	13722	QC Prep Batch Number	990086	Sample analyzed within	1 Day(s) from collection				
Client ID	Trip Blank	Sample Description	Collection	1/13/99	Time				
1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.6	ns	1	8260	srh	1/14/99
1,1,1-Trichloroethane	< 0.2	ug/l	0.2	0.7	40	1	8260	srh	1/14/99
1,1,2,2-Tetrachloroethane	< 0.3	ug/l	0.3	0.9	0.02	1	8260	srh	1/14/99
1,1,2-Trichloroethane	< 0.3	ug/l	0.3	0.9	0.5	1	8260	srh	1/14/99
1,1-Dichloroethane	< 0.2	ug/l	0.2	0.5	85	1	8260	srh	1/14/99

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

WDNR# 241340550

BATCH NUMBER: 990012
 DATE REPORTED: 19-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

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

APL Environmental

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ORGANIC REPORT

WDNR# 241340550

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

BATCH NUMBER: 990012
DATE REPORTED: 19-Jan-99
DATE RECEIVED: 13-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	1/14/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/14/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/14/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/14/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	1/14/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	1/14/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/14/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	1/14/99
tert-Butylbenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/14/99
Tetrachloroethene	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/14/99
Toluene	<0.3	ug/l	0.3	1	68.6	1		8260	srh	1/14/99
trans-1,2-Dichloroethene	<0.2	ug/l	0.2	0.5	20	1		8260	srh	1/14/99
trans-1,3-Dichloropropene	<0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/14/99
Trichloroethene	<0.2	ug/l	0.2	0.5	0.5	1		8260	srh	1/14/99
Trichlorofluoromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/14/99
Vinyl chloride	<0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/14/99

Approved By: 

James Chang, Ph.D., Lab Director

Date: 1/19/99

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

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

WDNR# 241340550

INVOICE NUMBER: 990012
 DATE REPORTED: 27-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 13715										
Client ID: 990113WA01P										
							Collection: 1/13/99	Time: 14:20		
							Sample Description:			
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/18/99	990078	
Barium - ICAP	0.1	mg/l	RJ	0.003	0.010	200.7	dmd	1/18/99	990074	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/15/99	990059	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/18/99	990074	
Copper- ICAP	0.01	mg/l	J RJ	0.008	0.03	200.7	dmd	1/18/99	990074	
Iron - ICAP	1.2	mg/l	RJ	0.071	0.2	200.7	dmd	1/18/99	990074	
Lead - Furnace AA	5.8	ug/l	RJ	1.1	3.5	239.2	dmd	1/15/99	990058	
Manganese - ICAP	0.1	mg/l	RJ	0.009	0.03	200.7	dmd	1/18/99	990074	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	sp	1/14/99	990055	
Nickel - ICAP	0.03	mg/l	J RJ	0.011	0.03	200.7	dmd	1/18/99	990074	
Selenium - Furnace AA	13	ug/l	J RJ	7.8	25	270.2	dmd	1/18/99	990076	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/18/99	990074	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/15/99	990064	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/18/99	990074	
Chromium, Hexavalent	<0.01	mg/l		0.012	0.04	SM 3500D	mvtl	1/14/99	990101	
COD. Total	11	mg/l		3.4	11	410.4-CT	van	1/18/99	990070	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/15/99	990062	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/15/99	990061	
pH (water)	7.4	s.u.	#			150.1	tg	1/13/99	990050	
Solids, Total Suspended	3.5	mg/l		0.5	1.6	SM 2540D	sp	1/18/99	990083	

Nova Sample Number: 13716

Client ID: 990113WA09R

							Collection: 1/13/99	Time: 15:10		
							Sample Description:			
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/18/99	990078	
Barium - ICAP	0.03	mg/l	RJ	0.003	0.010	200.7	dmd	1/18/99	990074	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/15/99	990059	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/18/99	990074	
Copper- ICAP	0.009	mg/l	J RJ	0.008	0.03	200.7	dmd	1/18/99	990074	
Iron - ICAP	0.2	mg/l	J RJ	0.071	0.2	200.7	dmd	1/18/99	990074	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/15/99	990058	
Manganese - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd	1/18/99	990074	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	sp	1/14/99	990055	



INORGANIC REPORT

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

WDNR# 241340550
 INVOICE NUMBER **990012**
 DATE REPORTED: 27-Jan-99
 DATE RECEIVED: 13-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nickel - ICAP	0.02	mg/l	J RJ	0.011	0.03	200.7	dmd	1/18/99	990074	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/18/99	990076	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/18/99	990074	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/15/99	990064	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/18/99	990074	
COD. Total	10	mg/l	J	3.4	11	410.4-CT	van	1/18/99	990070	
Nitrate + Nitrite Nitrogen	130	ug/l		4.1	13	353.3	12830	1/16/99	990120	
Nitrogen, Ammonia	2400	ug/l		10	32	350.1	12830	1/22/99	990118	
Phosphorus, Total	0.05	mg/l	J	0.033	0.1	365.2	van	1/20/99	990096	
Solids, Total Suspended	<0.6	mg/l		0.6	1.9	SM 2540D	sp	1/18/99	990083	

Nova Sample Number: 13717

Client ID: 990113WA02P

pH (water)	9.6	s.u.	#	150.1
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Collection: 1/13/99 Time: 14:30
 Sample Description:

tg	1/13/99	990050
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Nova Sample Number: 13718

Client ID: 990113WA03P

pH (water)	11	s.u.	#	150.1
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Collection: 1/13/99 Time: 14:35
 Sample Description:

tg	1/13/99	990050
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Nova Sample Number: 13719

Client ID: 990113WA05P

pH (water)	7.4	s.u.	#	150.1
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Collection: 1/13/99 Time: 14:40
 Sample Description:

tg	1/13/99	990050
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Nova Sample Number: 13721

Client ID: 990113WA09P

Chromium, Hexavalent	<0.01	mg/l		0.012	0.04	SM 3500D	mvtl	1/14/99	990101	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/15/99	990062	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/15/99	990061	

Collection: 1/13/99 Time: 15:00
 Sample Description:



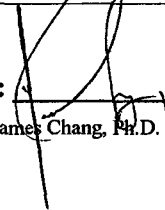
INORGANIC REPORT

WDNR# 241340550

INVOICE NUMBER 990012
DATE REPORTED: 27-Jan-99
DATE RECEIVED: 13-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: OGTP

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

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
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Approved By:  Date: 1/27/99
James Chang, Ph.D., Lab Director

RJ Result expressed as Total.

TTR Result expressed as total and total recoverable.

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.

LOQ = 10 (S) x Dilution 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.

APL Environmental

8222 W. Calumet Rd., Milwaukee, WI 53223
 Phone: (414) 355-5800 Fax: (414) 355-3099

425# 44002

Project Name: Weekly Sampling.
 Project ID: _____

Project Manager: Sony Goldman
 Company: _____
 Address: _____
 City/State/Zip: _____
 Phone: _____ Fax: _____

DEPT. OF NATURAL RESOURCES
 SD HEADQUARTERS

Samples received "On Ice" Temperature: _____ C Sample intact/not leaking

- A. HCl
 - B. HNO3
 - C. NaOH
 - D. H2SO4
 - E. Methanol
 - F. Filtered
 - G. None
 - H. Others
- 100
 Preservation / Filtration Code

Test Required	Matrix											Preservation / Filtration Code					
01 CN ⁻ (Total & Amenable)	Gw.	X				X											C
02 Total Metals		X				X											B
03 VOC'S		X				X	X										A
04 Hexc. Cr.		X				X											G
05 pH		X	X	X	X												G
06																	
07																	
08																	
09																	
10																	
11																	
12																	
13																	
14																	
15																	

Additional Information:
 Hexavalent Cr.
 Sampled at 1:30 pm
1/6/99.

Collection Time	Collection Date	Sample ID	Lab ID	COC#
9:20	1/6/99	990106WA01P	13661	
9:30		990106WA02P	13663	
9:35		990106WA03P	13664	
9:40		990106WA05P	13665	
9:50		990106WA09P	13662	
		Trip Blank	13666	

Relinquished By: <u>Anthony Goldman</u>	Date/Time: <u>1/6/99</u>	Received By: <u>[Signature]</u>
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Special Instructions:

APL Environmental

8222 W. Calumet Rd., Milwaukee, WI 53223
Phone: (414) 355-5800 Fax: (414) 355-3099

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
DATE REPORTED: 15-Jan-99
DATE RECEIVED: 06-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Weekly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 13661										
QC Prep Batch Number: 990044										
Sample analyzed within 7 Day(s) from collection.										
Client ID: 990106WAD1P Sample Description: Collection: 1/6/99 Time: 09:20										
1,1,1,2-Tetrachloroethane	<2	ug/l	2	6.4	ns	10		8260	srh	1/13/99
1,1,1-Trichloroethane	88	ug/l	2.3	7.3	40	10		8260	srh	1/13/99
1,1,2,2-Tetrachloroethane	<2.9	ug/l	2.9	9.2	0.02	10		8260	srh	1/13/99
1,1,2-Trichloroethane	<2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/13/99
1,1-Dichloroethane	42	ug/l	1.5	4.8	85	10		8260	srh	1/13/99
1,1-Dichloroethene	7.9	ug/l	3.6	11	0.7	10	J	8260	srh	1/13/99
1,1-Dichloropropene	<4.9	ug/l	4.9	16	ns	10		8260	srh	1/13/99
1,2,3-Trichlorobenzene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/13/99
1,2,3-Trichloropropane	<6	ug/l	6	19	ns	10		8260	srh	1/13/99
1,2,4-Trichlorobenzene	<1.6	ug/l	1.6	5.1	14	10		8260	srh	1/13/99
1,2,4-Trimethylbenzene	<2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/13/99
1,2-Dibromoethane	<2.4	ug/l	2.4	7.6	0.005	10		8260	srh	1/13/99
1,2-Dichlorobenzene	<2	ug/l	2	6.4	60	10		8260	srh	1/13/99
1,2-Dichloroethane	<1.9	ug/l	1.9	6	0.5	10		8260	srh	1/13/99
1,2-Dichloropropane	<2.3	ug/l	2.3	7.3	0.5	10		8260	srh	1/13/99
1,3,5-Trimethylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/13/99
1,3-Dichlorobenzene	<1.9	ug/l	1.9	6	125	10		8260	srh	1/13/99
1,3-Dichloropropane	<2.1	ug/l	2.1	6.7	ns	10		8260	srh	1/13/99
1,4-Dichlorobenzene	<1.5	ug/l	1.5	4.8	15	10		8260	srh	1/13/99
1,2-Dibromo-3-chloropropan	<5.9	ug/l	5.9	19	0.02	10		8260	srh	1/13/99
2,2-Dichloropropane	<4	ug/l	4	13	ns	10		8260	srh	1/13/99
2-Butanone (MEK)	<14	ug/l	14	44	90	10		8260	srh	1/13/99
2-Chloroethyl Vinyl Ether	<2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/13/99
2-Chlorotoluene	<1.5	ug/l	1.5	4.8	ns	10		8260	srh	1/13/99
4-Chlorotoluene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/13/99
4-Methyl-2-Pentanone	<8.4	ug/l	8.4	27	50	10		8260	srh	1/13/99
Acetone	<16	ug/l	16	49	200	10		8260	srh	1/13/99
Benzene	<1.9	ug/l	1.9	6	0.5	10		8260	srh	1/13/99
Bromobenzene	<1.9	ug/l	1.9	6	ns	10		8260	srh	1/13/99
Bromochloromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/13/99
Bromodichloromethane	<2.6	ug/l	2.6	8.3	0.06	10		8260	srh	1/13/99
Bromoform	<4.7	ug/l	4.7	15	0.44	10		8260	srh	1/13/99
Bromomethane	<2.1	ug/l	2.1	6.7	1	10		8260	srh	1/13/99
Carbon tetrachloride	<2.2	ug/l	2.2	7	0.5	10		8260	srh	1/13/99
Chlorobenzene	<2	ug/l	2	6.4	20	10		8260	srh	1/13/99
Chloroethane	<12	ug/l	12	37	80	10		8260	srh	1/13/99
Chloroform	<2.7	ug/l	2.7	8.6	0.6	10		8260	srh	1/13/99
Chloromethane	<7.7	ug/l	7.7	24	0.3	10		8260	srh	1/13/99
cis-1,2-Dichloroethene	45	ug/l	2	6.4	7	10		8260	srh	1/13/99
cis-1,3-Dichloropropene	<2.4	ug/l	2.4	7.6	0.02	10		8260	srh	1/13/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
 DATE REPORTED: 15-Jan-99
 DATE RECEIVED: 06-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: Weekly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Dibromochloromethane	<2.1	ug/l	2.1	6.7	6	10		8260	srh	1/13/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	srh	1/13/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	srh	1/13/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	srh	1/13/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/13/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	srh	1/13/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	srh	1/13/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	srh	1/13/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	srh	1/13/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	srh	1/13/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/13/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/13/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	srh	1/13/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	srh	1/13/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	srh	1/13/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	srh	1/13/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	srh	1/13/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	srh	1/13/99
Tetrachloroethene	<2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/13/99
Toluene	<3.3	ug/l	3.3	10	68.6	10		8260	srh	1/13/99
trans-1,2-Dichloroethene	3.8	ug/l	1.6	5.1	20	10	J	8260	srh	1/13/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	srh	1/13/99
Trichloroethene	360	ug/l	1.6	5.1	0.5	10		8260	srh	1/13/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/13/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	srh	1/13/99

Sample Number: 13662 QC Prep Batch Number: 990044 Sample analyzed within 7 Day(s) from collection
 Client ID: 990106WA09P Sample Description: Collection: 1/6/99 Time: 09:30

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
1,1,1-Trichloroethane	2	ug/l	0.2	0.7	40	1		8260	srh	1/13/99
1,1,1,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	1/13/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/13/99
1,1-Dichloroethane	1.5	ug/l	0.2	0.5	85	1		8260	srh	1/13/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	1/13/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	1/13/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	1/13/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	1/13/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/13/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	1/13/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	1/13/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/13/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
DATE REPORTED: 15-Jan-99
DATE RECEIVED: 06-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Weekly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/13/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	1/13/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	1/13/99
1,2-Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/13/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/13/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	1/13/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/13/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/13/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/13/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	1/13/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	1/13/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/13/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/13/99
Bromodichloromethane	2.3	ug/l	0.3	0.8	0.06	1		8260	srh	1/13/99
Bromoform	<0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/13/99
Bromomethane	<0.2	ug/l	0.2	0.7	1	1		8260	srh	1/13/99
Carbon tetrachloride	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/13/99
Chlorobenzene	<0.2	ug/l	0.2	0.6	20	1		8260	srh	1/13/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	srh	1/13/99
Chloroform	11	ug/l	0.3	0.9	0.6	1		8260	srh	1/13/99
Chloromethane	<0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/13/99
cis-1,2-Dichloroethene	0.4	ug/l	0.2	0.6	7	1	J	8260	srh	1/13/99
cis-1,3-Dichloropropene	<0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/13/99
Dibromochloromethane	0.7	ug/l	0.2	0.7	6	1	J	8260	srh	1/13/99
Dibromomethane	<0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/13/99
Dichlorodifluoromethane	<0.4	ug/l	0.4	1.1	200	1		8260	srh	1/13/99
Ethylbenzene	<0.2	ug/l	0.2	0.5	140	1		8260	srh	1/13/99
Hexachlorobutadiene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
Isopropyl Ether	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/13/99
Isopropylbenzene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/13/99
m&p-xylene	<0.4	ug/l	0.4	1.1	124	1		8260	srh	1/13/99
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	1/13/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/13/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/13/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	1/13/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	1/13/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/13/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	1/13/99

APL Environmental

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2572 Oak St.
Ashippun, WI 53003

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
DATE REPORTED: 15-Jan-99
DATE RECEIVED: 06-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Weekly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/13/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	1/13/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	1/13/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/13/99
Trichloroethene	0.5	ug/l	0.2	0.5	0.5	1	J	8260	srh	1/13/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/13/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/13/99

Sample Number: 13666 QC Prep Batch Number: 990044 Sample analyzed within 7 Day(s) from collection.

Client ID: Tripblank Sample Description: Collection: 1/6/99 Time:

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
1,1,1-Trichloroethane	< 0.2	ug/l	0.2	0.7	40	1		8260	srh	1/13/99
1,1,2,2-Tetrachloroethane	< 0.3	ug/l	0.3	0.9	0.02	1		8260	srh	1/13/99
1,1,2-Trichloroethane	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/13/99
1,1-Dichloroethane	< 0.2	ug/l	0.2	0.5	85	1		8260	srh	1/13/99
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.1	0.7	1		8260	srh	1/13/99
1,1-Dichloropropene	< 0.5	ug/l	0.5	1.6	ns	1		8260	srh	1/13/99
1,2,3-Trichlorobenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	srh	1/13/99
1,2,4-Trichlorobenzene	< 0.2	ug/l	0.2	0.5	14	1		8260	srh	1/13/99
1,2,4-Trimethylbenzene	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/13/99
1,2-Dibromoethane	< 0.2	ug/l	0.2	0.8	0.005	1		8260	srh	1/13/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	60	1		8260	srh	1/13/99
1,2-Dichloroethane	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/13/99
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/13/99
1,3,5-Trimethylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	1/13/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	1/13/99
1,2-Dibromo-3-chloropropane	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/13/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/13/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	1/13/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/13/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/13/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/13/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	1/13/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	1/13/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/13/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/13/99
Bromodichloromethane	< 0.3	ug/l	0.3	0.8	0.06	1		8260	srh	1/13/99

APL Environmental

8222 W. Calumet Rd., Milwaukee, WI 53223
Phone: (414) 355-5800 Fax: (414) 355-3099

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
DATE REPORTED: 15-Jan-99
DATE RECEIVED: 06-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Weekly Sampling

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/13/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	1/13/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/13/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	1/13/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	1/13/99
Chloroform	< 0.3	ug/l	0.3	0.9	0.6	1		8260	srh	1/13/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/13/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	1/13/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/13/99
Dibromochloromethane	< 0.2	ug/l	0.2	0.7	6	1		8260	srh	1/13/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/13/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	1/13/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	1/13/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/13/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/13/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	1/13/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	1/13/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/13/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/13/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/13/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	1/13/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	1/13/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/13/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	1/13/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/13/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/13/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	1/13/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	1/13/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/13/99
Trichloroethene	< 0.2	ug/l	0.2	0.5	0.5	1		8260	srh	1/13/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/13/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/13/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990002
DATE REPORTED: 15-Jan-99
DATE RECEIVED: 06-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: Weekly Sampling

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

James Chang, Ph.D., Lab Director

Date: 1/15/99

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "e" = Estimate value, over calibration range.

LOQ = $10 (S) \times \text{Dilution Factor}$, where "S" is the Standard Deviation from the MDL Study

LOD = $3.143 (S) \times \text{Dilution Factor}$, 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

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

WDNR# 241340550
 INVOICE NUMBER 990002
 DATE REPORTED: 20-Jan-99
 DATE RECEIVED: 06-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: Weekly Sampling

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 13661										
Client ID: 990106WAD1P										
							Collection: 1/6/99	Time: 09:20		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/18/99	990078	
Barium - ICAP	0.1	mg/l	RJ	0.003	0.010	200.7	dmd	1/18/99	990074	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/15/99	990059	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/18/99	990074	
Copper- ICAP	0.02	mg/l	J RJ	0.008	0.03	200.7	dmd	1/18/99	990074	
Iron - ICAP	0.3	mg/l	RJ	0.071	0.2	200.7	dmd	1/18/99	990074	
Lead - Furnace AA	1.9	ug/l	J RJ	1.1	3.5	239.2	dmd	1/15/99	990058	
Manganese - ICAP	0.3	mg/l	RJ	0.009	0.03	200.7	dmd	1/18/99	990074	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	sp	1/14/99	990055	
Nickel - ICAP	0.09	mg/l	RJ	0.011	0.03	200.7	dmd	1/18/99	990074	
Selenium - Furnace AA	8.9	ug/l	J RJ	7.8	25	270.2	dmd	1/18/99	990076	
Silver - ICAP	0.009	mg/l	J RJ	0.006	0.02	200.7	dmd	1/18/99	990074	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/15/99	990064	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/18/99	990074	
Chromium, Hexavalent	<0.01	mg/l		0.01	0.03	SM 3500D	mvtl	1/7/99	990025	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/12/99	990039	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/12/98	990038	
pH (water)	7.1	s.u.	#			150.1	tg	1/6/99	990016	at ogtp

Nova Sample Number: 13662										
Client ID: 990106WA09P										
							Collection: 1/6/99	Time: 09:50		
Sample Description:										
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/18/99	990078	
Barium - ICAP	0.01	mg/l	RJ	0.003	0.010	200.7	dmd	1/18/99	990074	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/15/99	990059	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/18/99	990074	
Copper- ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	1/18/99	990074	
Iron - ICAP	<0.071	mg/l	RJ	0.071	0.2	200.7	dmd	1/18/99	990074	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/15/99	990058	
Manganese - ICAP	<0.009	mg/l	RJ	0.009	0.03	200.7	dmd	1/18/99	990074	
Mercury CV	<0.0002	mg/l		0.0002	0.0006	245.1	sp	1/14/99	990055	
Nickel - ICAP	0.02	mg/l	J RJ	0.011	0.03	200.7	dmd	1/18/99	990074	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/18/99	990076	



INORGANIC REPORT

WDNR# 241340550

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

INVOICE NUMBER 990002
 DATE REPORTED: 20-Jan-99
 DATE RECEIVED: 06-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: Weekly Sampling

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/18/99	990074	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/15/99	990064	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/18/99	990074	
Chromium, Hexavalent	<0.01	mg/l		0.01	0.03	SM 3500D	mvtl	1/7/99	990025	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/12/99	990039	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/12/98	990038	

Nova Sample Number: 13663
 Client ID: 990106WA02P

pH (water) 10 s.u. # 150.1

Collection: 1/6/99 Time: 09:35
 Sample Description:
 tg 1/6/99 990016 at ogtp

Nova Sample Number: 13664
 Client ID: 990106WA03P

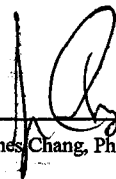
pH (water) 11 s.u. # 150.1

Collection: 1/6/99 Time: 09:35
 Sample Description:
 tg 1/6/99 990016 at ogtp

Nova Sample Number: 13665
 Client ID: 990106WA05P

pH (water) 7.6 s.u. # 150.1

Collection: 1/6/99 Time: 09:40
 Sample Description:
 tg 1/6/99 990016 at ogtp

Approved By:  Date: 1/21/99
 James Chang, Ph.D., Lab Director

RJ Result expressed as Total.

TTR Result expressed as total and total recoverable.

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.

LOQ = 10 (S) x Dilution 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.

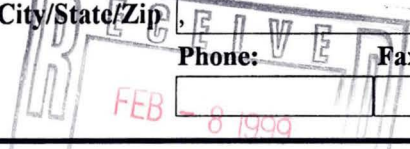
APL Environmental

8222 W. Calumet Rd., Milwaukee, WI 53223
 Phone: (414) 355-5800 Fax: (414) 355-3099

990027

Project Name: OGTP
 Project ID: _____

Project Manager: Jim Chang
 Company: _____
 Address: _____
 City/State/Zip: _____
 Phone: _____ Fax: _____



Samples received "On Ice" Temperature: _____ C Sample intact/not leaking

- A. HCl
 - B. HNO3
 - C. NaOH
 - D. H2SO4
 - E. Methanol
 - F. Filtered
 - G. None
 - H. Others
- 100 Preservation / Filtration Code

Test Required	Matrix	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Code
01 PH	GLW	X	X	X	X	X													G
02 METALS	I	X						X											B
03 VOC'S 8260W	I	X						X											A
04 Cup Am. 2. (Total + Amenable)	I	X						X											C
05 Hexavalent Chromium	I	X						X											G
06																			
07																			
08																			
09																			
10																			
11																			
12																			
13																			
14																			
15																			

Additional Information:

PH = 01P = 7.5
 02P = 9.3
 03P = 11.1
 05P = 7.1
 09P = 8.1

Collection Time	Collection Date	Sample ID	Lab ID	COC#
14:15	1/24/99	9901200A01P	13771	
14:20		9901200A02P	13774	
14:25		9901200A03P	13775	
14:30		9901200A05P	13776	
14:35		9901200A05P	13773	
14:40		9901200A05P	13772	
		TRIP BLANK	13777	

Relinquished By:	Date/Time: 1/24/99	Received By:
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Special Instructions:



INORGANIC REPORT

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

WDNR# 241340550

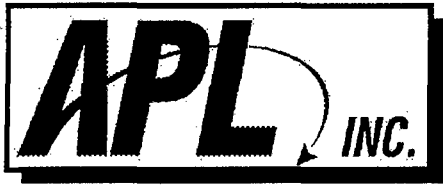
INVOICE NUMBER: 990027
 DATE REPORTED: 01-Feb-99
 DATE RECEIVED: 21-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 13771										
Client ID: 990120WA01P										
								Collection: 1/20/99	Time: 14:15	
								Sample Description: pH 7.5		
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/26/99	990129	
Barium - ICAP	0.1	mg/l	RJ	0.003	0.010	200.7	dmd	1/26/99	990114	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/27/99	990127	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/26/99	990114	
Copper - ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	1/26/99	990114	
Iron - ICAP	0.8	mg/l	RJ	0.071	0.2	200.7	dmd	1/26/99	990114	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/27/99	990128	
Manganese - ICAP	0.1	mg/l	RJ	0.009	0.03	200.7	dmd	1/26/99	990114	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	1/28/99	990162	
Nickel - ICAP	0.02	mg/l	J RJ	0.011	0.03	200.7	dmd	1/26/99	990114	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/26/99	990131	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/26/99	990114	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/26/99	990130	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/26/99	990114	
Chromium, Hexavalent	<10	ug/l		10	32	SM 3500D	12830	1/21/99	990139	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/27/99	990126	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/27/99	990125	
pH (water)	7.5	s.u.	#			150.1	dmd	1/20/99	990098	

Nova Sample Number: 13772

Client ID: 990120WA09R

								Collection: 1/20/99	Time: 14:40	
								Sample Description:		
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/26/99	990129	
Barium - ICAP	0.1	mg/l	RJ	0.003	0.010	200.7	dmd	1/26/99	990114	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/27/99	990127	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/26/99	990114	
Copper - ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	1/26/99	990114	
Iron - ICAP	0.2	mg/l	J RJ	0.071	0.2	200.7	dmd	1/26/99	990114	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/27/99	990128	
Manganese - ICAP	0.02	mg/l	J RJ	0.009	0.03	200.7	dmd	1/26/99	990114	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	1/28/99	990162	
Nickel - ICAP	0.02	mg/l	J RJ	0.011	0.03	200.7	dmd	1/26/99	990114	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/26/99	990131	



INORGANIC REPORT

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

WDNR# 241340550
 INVOICE NUMBER 990027
 DATE REPORTED: 01-Feb-99
 DATE RECEIVED: 21-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/26/99	990114	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/26/99	990130	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/26/99	990114	

Nova Sample Number: 13773

Client ID: 990120WA09P

Collection: 1/20/99 Time: 14:35
 Sample Description: pH 8.1

Chromium, Hexavalent	<10	ug/l		0.012	0.04	SM 3500D	12830	1/21/99	990139	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	1/27/99	990126	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	1/27/99	990125	
pH (water)	8.1	s.u.	#			150.1	dmd	1/20/99	990098	

Nova Sample Number: 13774

Client ID: 990120WA02P

Collection: 1/20/99 Time: 14:20
 Sample Description: pH 9.3

pH (water)	9.3	s.u.	#			150.1	dmd	1/20/99	990098	
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Nova Sample Number: 13775

Client ID: 990120WA03P

Collection: 1/20/99 Time: 14:25
 Sample Description: pH 11.1

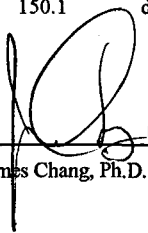
pH (water)	11	s.u.	#			150.1	dmd	1/20/99	990098	
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Nova Sample Number: 13776

Client ID: 990120WA05P

Collection: 1/20/99 Time: 14:30
 Sample Description: pH 7.1

pH (water)	7.1	s.u.	#			150.1	dmd	1/20/99	990098	
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Approved By: 
 James Chang, Ph.D., Lab Director

Date: 2/1/99

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.

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
DATE REPORTED: 25-Jan-99
DATE RECEIVED: 21-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Sample Number: 13771										
QC Prep Batch Number: 990108										
Sample analyzed within 2 Days from collection										
Client ID: 990120WA01P										
Sample Description: pH 7.5										
Collection: 1/20/99 Time: 14:15										
1,1,1,2-Tetrachloroethane	< 2	ug/l	2	6.4	ns	10		8260	srh	1/22/99
1,1,1-Trichloroethane	75	ug/l	2.3	7.3	40	10		8260	srh	1/22/99
1,1,2,2-Tetrachloroethane	< 2.9	ug/l	2.9	9.2	0.02	10		8260	srh	1/22/99
1,1,2-Trichloroethane	< 2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/22/99
1,1-Dichloroethane	41	ug/l	1.5	4.8	85	10		8260	srh	1/22/99
1,1-Dichloroethene	7.6	ug/l	3.6	11	0.7	10	J	8260	srh	1/22/99
1,1-Dichloropropene	< 4.9	ug/l	4.9	16	ns	10		8260	srh	1/22/99
1,2,3-Trichlorobenzene	< 2.2	ug/l	2.2	7	ns	10		8260	srh	1/22/99
1,2,3-Trichloropropane	< 6	ug/l	6	19	ns	10		8260	srh	1/22/99
1,2,4-Trichlorobenzene	< 1.6	ug/l	1.6	5.1	14	10		8260	srh	1/22/99
1,2,4-Trimethylbenzene	3.1	ug/l	2.9	9.2	ns	10	J	8260	srh	1/22/99
1,2-Dibromoethane	< 2.4	ug/l	2.4	7.6	0.005	10		8260	srh	1/22/99
1,2-Dichlorobenzene	< 2	ug/l	2	6.4	60	10		8260	srh	1/22/99
1,2-Dichloroethane	< 1.9	ug/l	1.9	6	0.5	10		8260	srh	1/22/99
1,2-Dichloropropane	< 2.3	ug/l	2.3	7.3	0.5	10		8260	srh	1/22/99
1,3,5-Trimethylbenzene	< 2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/22/99
1,3-Dichlorobenzene	< 1.9	ug/l	1.9	6	125	10		8260	srh	1/22/99
1,3-Dichloropropane	< 2.1	ug/l	2.1	6.7	ns	10		8260	srh	1/22/99
1,4-Dichlorobenzene	< 1.5	ug/l	1.5	4.8	15	10		8260	srh	1/22/99
1,2-Dibromo-3-chloropropan	< 5.9	ug/l	5.9	19	0.02	10		8260	srh	1/22/99
2,2-Dichloropropane	< 4	ug/l	4	13	ns	10		8260	srh	1/22/99
2-Butanone (MEK)	< 14	ug/l	14	44	90	10		8260	srh	1/22/99
2-Chloroethyl Vinyl Ether	< 2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/22/99
2-Chlorotoluene	< 1.5	ug/l	1.5	4.8	ns	10		8260	srh	1/22/99
4-Chlorotoluene	< 2.5	ug/l	2.5	8	ns	10		8260	srh	1/22/99
4-Methyl-2-Pentanone	< 8.4	ug/l	8.4	27	50	10		8260	srh	1/22/99
Acetone	< 16	ug/l	16	49	200	10		8260	srh	1/22/99
Benzene	2.2	ug/l	1.9	6	0.5	10	J	8260	srh	1/22/99
Bromobenzene	< 1.9	ug/l	1.9	6	ns	10		8260	srh	1/22/99
Bromochloromethane	< 3.4	ug/l	3.4	11	ns	10		8260	srh	1/22/99
Bromodichloromethane	< 2.6	ug/l	2.6	8.3	0.06	10		8260	srh	1/22/99
Bromoform	< 4.7	ug/l	4.7	15	0.44	10		8260	srh	1/22/99
Bromomethane	< 2.1	ug/l	2.1	6.7	1	10		8260	srh	1/22/99
Carbon tetrachloride	< 2.2	ug/l	2.2	7	0.5	10		8260	srh	1/22/99
Chlorobenzene	< 2	ug/l	2	6.4	20	10		8260	srh	1/22/99
Chloroethane	< 12	ug/l	12	37	80	10		8260	srh	1/22/99
Chloroform	< 2.7	ug/l	2.7	8.6	0.6	10		8260	srh	1/22/99
Chloromethane	< 7.7	ug/l	7.7	24	0.3	10		8260	srh	1/22/99
cis-1,2-Dichloroethene	55	ug/l	2	6.4	7	10		8260	srh	1/22/99
cis-1,3-Dichloropropene	< 2.4	ug/l	2.4	7.6	0.02	10		8260	srh	1/22/99

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
DATE REPORTED: 25-Jan-99
DATE RECEIVED: 21-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
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	srh	1/22/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	srh	1/22/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	srh	1/22/99
Ethylbenzene	2.4	ug/l	1.6	5.1	140	10	J	8260	srh	1/22/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/22/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	srh	1/22/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	srh	1/22/99
m&p-xylene	5.9	ug/l	3.6	11	124	10	J	8260	srh	1/22/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	srh	1/22/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	srh	1/22/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/22/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/22/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	srh	1/22/99
o-xylene	2.1	ug/l	1.8	5.7	124	10	J	8260	srh	1/22/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	srh	1/22/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	srh	1/22/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	srh	1/22/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	srh	1/22/99
Tetrachloroethene	<2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/22/99
Toluene	7.5	ug/l	3.3	10	68.6	10	J	8260	srh	1/22/99
trans-1,2-Dichloroethene	4.7	ug/l	1.6	5.1	20	10	J	8260	srh	1/22/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	srh	1/22/99
Trichloroethene	360	ug/l	1.6	5.1	0.5	10		8260	srh	1/22/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/22/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	srh	1/22/99

Sample Number: 13773 QC Prep Batch Number: 990108 Sample analyzed within 2 Day(s) from collection.

Client ID: 990120WA09P Sample Description: pH 8.1 Collection: 1/20/99 Time: 14:35

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

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
 DATE REPORTED: 25-Jan-99
 DATE RECEIVED: 21-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/22/99
1,3,5-Trimethylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/22/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	1/22/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/22/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	1/22/99
12Dibromo-3-chloropropan	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/22/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/22/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	1/22/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/22/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/22/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/22/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	1/22/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	1/22/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/22/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/22/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/22/99
Bromodichloromethane	2.5	ug/l	0.3	0.8	0.06	1		8260	srh	1/22/99
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/22/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	1/22/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/22/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	1/22/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	1/22/99
Chloroform	6.1	ug/l	0.3	0.9	0.6	1		8260	srh	1/22/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/22/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	1/22/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/22/99
Dibromochloromethane	1.2	ug/l	0.2	0.7	6	1		8260	srh	1/22/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/22/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	1/22/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	1/22/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/22/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/22/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/22/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	1/22/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	1/22/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/22/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/22/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/22/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	1/22/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	1/22/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/22/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/22/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	1/22/99

APL Environmental

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James Chang
 Oconomowoc Groundwater Treatment Plant
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ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
 DATE REPORTED: 25-Jan-99
 DATE RECEIVED: 21-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME: OGTP

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

Sample Number: 13777

QC Prep Batch Number: 990108

Sample analyzed within 2 Day(s) from collection

Client ID	Trip Blank	Sample Description	Collection	Time
		1,1,1,2-Tetrachloroethane	1/20/99	
		1,1,1-Trichloroethane	1/20/99	
		1,1,2,2-Tetrachloroethane	1/20/99	
		1,1,2-Trichloroethane	1/20/99	
		1,1-Dichloroethane	1/20/99	
		1,1-Dichloroethene	1/20/99	
		1,1-Dichloropropene	1/20/99	
		1,2,3-Trichlorobenzene	1/20/99	
		1,2,3-Trichloropropane	1/20/99	
		1,2,4-Trichlorobenzene	1/20/99	
		1,2,4-Trimethylbenzene	1/20/99	
		1,2-Dibromoethane	1/20/99	
		1,2-Dichlorobenzene	1/20/99	
		1,2-Dichloroethane	1/20/99	
		1,2-Dichloropropane	1/20/99	
		1,3,5-Trimethylbenzene	1/20/99	
		1,3-Dichlorobenzene	1/20/99	
		1,3-Dichloropropane	1/20/99	
		1,4-Dichlorobenzene	1/20/99	
		1,2,4-Dibromo-3-chloropropan	1/20/99	
		2,2-Dichloropropane	1/20/99	
		2-Butanone (MEK)	1/20/99	
		2-Chloroethyl Vinyl Ether	1/20/99	
		2-Chlorotoluene	1/20/99	
		4-Chlorotoluene	1/20/99	
		4-Methyl-2-Pentanone	1/20/99	
		Acetone	1/20/99	
		Benzene	1/20/99	
		Bromobenzene	1/20/99	
		Bromochloromethane	1/20/99	
		Bromodichloromethane	1/20/99	

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
DATE REPORTED: 25-Jan-99
DATE RECEIVED: 21-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: OGTP

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

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990027
DATE REPORTED: 25-Jan-99
DATE RECEIVED: 21-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME: OGTP

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
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Approved By: James Chang / sncd Date: 1/25/99
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

INVOICE NUMBER 990039
 DATE REPORTED: 05-Feb-99
 DATE RECEIVED: 26-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME:

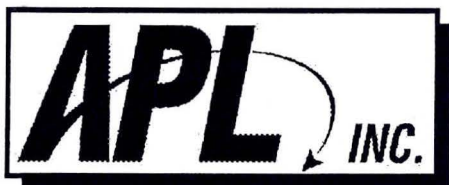
James Chang
 Oconomowoc Groundwater Treatment Plant
 2572 Oak St.
 Ashippun, WI 53003

Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
Nova Sample Number: 13823										
Client ID: 990125WA01P										
							Collection: 1/25/99	Time: 14:00		
							Sample Description: grab			
Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/26/99	990129	
Barium - ICAP	0.1	mg/l	RJ	0.003	0.010	200.7	dmd	1/26/99	990114	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/27/99	990127	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/26/99	990114	
Copper- ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	1/26/99	990114	
Iron - ICAP	0.6	mg/l	RJ	0.071	0.2	200.7	dmd	1/26/99	990114	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/27/99	990128	
Manganese - ICAP	0.2	mg/l	RJ	0.009	0.03	200.7	dmd	1/26/99	990114	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	1/28/99	990162	
Nickel - ICAP	0.04	mg/l	RJ	0.011	0.03	200.7	dmd	1/26/99	990114	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/26/99	990131	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/26/99	990114	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/26/99	990130	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/26/99	990114	
Chromium, Hexavalent	<10	ug/l		10	32	SM 3500D	12830	1/26/99	990123	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	2/5/99	990199	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	2/5/99	990197	
pH (water)	7.1	s.u.	#			150.1	dmd	1/25/99	990143	

Nova Sample Number: 13824										
Client ID: 990125WA09P										
							Collection: 1/25/99	Time: 14:25		
							Sample Description: grab			
Chromium, Hexavalent	<10	ug/l		10	32	SM 3500D	12830	1/26/99	990123	
Cyanide, Amenable	<0.018	mg/l		0.018	0.06	335.2	van	2/5/99	990199	
Cyanide, Total	<0.018	mg/l		0.018	0.06	335.2	van	2/5/99	990197	
pH (water)	8.4	s.u.	#			150.1	dmd	1/25/99	990143	

Nova Sample Number: 13825										
Client ID: 990125WA02P										
							Collection: 1/25/99	Time: 14:05		
							Sample Description: grab			
pH (water)	9.8	s.u.	#			150.1	dmd	1/25/99	990143	

Nova Sample Number: 13826										
Client ID: 990125WA03P										
							Collection: 1/25/99	Time: 14:15		
							Sample Description: grab			



INORGANIC REPORT

WDNR# 241340550
 INVOICE NUMBER 990039
 DATE REPORTED: 05-Feb-99
 DATE RECEIVED: 26-Jan-99
 SAMPLE TEMP (C): Rec On Ice
 PROJECT ID:
 PROJECT NAME:

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

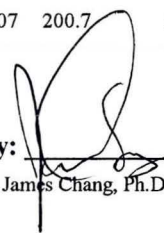
Test	Result	Units	RQ	LOD	LOQ	Method	Analyst	Date Anal	QC#	Comments
pH (water)	11	s.u.	#			150.1	dmd	1/25/99	990143	

Nova Sample Number: 13827
 Client ID: 990125WA05P
 Collection: 1/25/99 Time: 14:20
 Sample Description: grab

pH (water)	7.1	s.u.	#			150.1	dmd	1/25/99	990143	
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Nova Sample Number: 13828
 Client ID: 990125WA09R
 Collection: 1/25/99 Time: 14:30
 Sample Description: 24hr composite

Arsenic - Furnace AA	<9.9	ug/l	RJ	9.9	31	206.2	dmd	1/26/99	990129	
Barium - ICAP	0.02	mg/l	RJ	0.003	0.010	200.7	dmd	1/26/99	990114	
Cadmium - Furnace AA	<0.7	ug/l	TTR	0.7	2.2	213.2	dmd	1/27/99	990127	
Chromium, Total - ICAP	<0.01	mg/l	RJ	0.01	0.03	200.7	dmd	1/26/99	990114	
Copper - ICAP	<0.008	mg/l	RJ	0.008	0.03	200.7	dmd	1/26/99	990114	
Iron - ICAP	<0.071	mg/l	RJ	0.071	0.2	200.7	dmd	1/26/99	990114	
Lead - Furnace AA	<1.1	ug/l	RJ	1.1	3.5	239.2	dmd	1/27/99	990128	
Manganese - ICAP	0.01	mg/l	J RJ	0.009	0.03	200.7	dmd	1/26/99	990114	
Mercury CV	<0.0002	mg/l	RJ	0.0002	0.0006	245.1	dmd	1/28/99	990162	
Nickel - ICAP	<0.011	mg/l	RJ	0.011	0.03	200.7	dmd	1/26/99	990114	
Selenium - Furnace AA	<7.8	ug/l	RJ	7.8	25	270.2	dmd	1/26/99	990131	
Silver - ICAP	<0.006	mg/l	RJ	0.006	0.02	200.7	dmd	1/26/99	990114	
Thallium - Furnace AA	<5.0	ug/l	RJ	5	16	279.2	dmd	1/26/99	990130	
Zinc - ICAP	<0.021	mg/l	RJ	0.021	0.07	200.7	dmd	1/26/99	990114	

Approved By:  Date: 2/5/99
 James Chang, Ph.D., Lab Director

RJ Result expressed as Total.

TTR Result expressed as total and total recoverable.

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "J" = Results between LOD and LOQ "#" = no LOD or LOQ required.

LOQ = 10 (S) x Dilution 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.

APL Environmental

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James Chang
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 2572 Oak St.
 Ashippun, WI 53003

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990039
 DATE REPORTED: 29-Jan-99
 DATE RECEIVED: 26-Jan-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: 13823		QC Prep Batch Number: 990154		Sample analyzed within 2 Day(s) from collection						
Client ID: 990125WA01P		Sample Description: grab		Collection: 1/25/99		Time: 14:00				
1,1,1,2-Tetrachloroethane	<2	ug/l	2	6.4	ns	10		8260	srh	1/27/99
1,1,1-Trichloroethane	309	ug/l	2.3	7.3	40	10		8260	srh	1/27/99
1,1,2,2-Tetrachloroethane	<2.9	ug/l	2.9	9.2	0.02	10		8260	srh	1/27/99
1,1,2-Trichloroethane	<2.9	ug/l	2.9	9.2	0.5	10		8260	srh	1/27/99
1,1-Dichloroethane	36	ug/l	1.5	4.8	85	10		8260	srh	1/27/99
1,1-Dichloroethene	19	ug/l	3.6	11	0.7	10		8260	srh	1/27/99
1,1-Dichloropropene	<4.9	ug/l	4.9	16	ns	10		8260	srh	1/27/99
1,2,3-Trichlorobenzene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/27/99
1,2,3-Trichloropropane	<6	ug/l	6	19	ns	10		8260	srh	1/27/99
1,2,4-Trichlorobenzene	<1.6	ug/l	1.6	5.1	14	10		8260	srh	1/27/99
1,2,4-Trimethylbenzene	<2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/27/99
1,2-Dibromoethane	<2.4	ug/l	2.4	7.6	0.005	10		8260	srh	1/27/99
1,2-Dichlorobenzene	<2	ug/l	2	6.4	60	10		8260	srh	1/27/99
1,2-Dichloroethane	<1.9	ug/l	1.9	6	0.5	10		8260	srh	1/27/99
1,2-Dichloropropane	<2.3	ug/l	2.3	7.3	0.5	10		8260	srh	1/27/99
1,3,5-Trimethylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/27/99
1,3-Dichlorobenzene	<1.9	ug/l	1.9	6	125	10		8260	srh	1/27/99
1,3-Dichloropropane	<2.1	ug/l	2.1	6.7	ns	10		8260	srh	1/27/99
1,4-Dichlorobenzene	<1.5	ug/l	1.5	4.8	15	10		8260	srh	1/27/99
1,2-Dibromo-3-chloropropan	<5.9	ug/l	5.9	19	0.02	10		8260	srh	1/27/99
2,2-Dichloropropane	<4	ug/l	4	13	ns	10		8260	srh	1/27/99
2-Butanone (MEK)	<14	ug/l	14	44	90	10		8260	srh	1/27/99
2-Chloroethyl Vinyl Ether	<2.9	ug/l	2.9	9.2	ns	10		8260	srh	1/27/99
2-Chlorotoluene	<1.5	ug/l	1.5	4.8	ns	10		8260	srh	1/27/99
4-Chlorotoluene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/27/99
4-Methyl-2-Pentanone	<8.4	ug/l	8.4	27	50	10		8260	srh	1/27/99
Acetone	<16	ug/l	16	49	200	10		8260	srh	1/27/99
Benzene	<1.9	ug/l	1.9	6	0.5	10		8260	srh	1/27/99
Bromobenzene	<1.9	ug/l	1.9	6	ns	10		8260	srh	1/27/99
Bromochloromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/27/99
Bromodichloromethane	<2.6	ug/l	2.6	8.3	0.06	10		8260	srh	1/27/99
Bromoform	<4.7	ug/l	4.7	15	0.44	10		8260	srh	1/27/99
Bromomethane	<2.1	ug/l	2.1	6.7	1	10		8260	srh	1/27/99
Carbon tetrachloride	<2.2	ug/l	2.2	7	0.5	10		8260	srh	1/27/99
Chlorobenzene	<2	ug/l	2	6.4	20	10		8260	srh	1/27/99
Chloroethane	<12	ug/l	12	37	80	10		8260	srh	1/27/99
Chloroform	<2.7	ug/l	2.7	8.6	0.6	10		8260	srh	1/27/99
Chloromethane	<7.7	ug/l	7.7	24	0.3	10		8260	srh	1/27/99
cis-1,2-Dichloroethene	64	ug/l	2	6.4	7	10		8260	srh	1/27/99
cis-1,3-Dichloropropene	<2.4	ug/l	2.4	7.6	0.02	10		8260	srh	1/27/99

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990039
 DATE REPORTED: 29-Jan-99
 DATE RECEIVED: 26-Jan-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	srh	1/27/99
Dibromomethane	<3.5	ug/l	3.5	11	ns	10		8260	srh	1/27/99
Dichlorodifluoromethane	<3.6	ug/l	3.6	11	200	10		8260	srh	1/27/99
Ethylbenzene	<1.6	ug/l	1.6	5.1	140	10		8260	srh	1/27/99
Hexachlorobutadiene	<2.2	ug/l	2.2	7	ns	10		8260	srh	1/27/99
Isopropyl Ether	<3.2	ug/l	3.2	10	ns	10		8260	srh	1/27/99
Isopropylbenzene	<1.6	ug/l	1.6	5.1	ns	10		8260	srh	1/27/99
m&p-xylene	<3.6	ug/l	3.6	11	124	10		8260	srh	1/27/99
Methyl-t-butyl ether	<2.1	ug/l	2.1	6.7	12	10		8260	srh	1/27/99
Methylene chloride	<7.6	ug/l	7.6	24	0.5	10		8260	srh	1/27/99
n-Butylbenzene	<2.3	ug/l	2.3	7.3	ns	10		8260	srh	1/27/99
n-Propylbenzene	<2.5	ug/l	2.5	8	ns	10		8260	srh	1/27/99
Naphthalene	<4.6	ug/l	4.6	15	8	10		8260	srh	1/27/99
o-xylene	<1.8	ug/l	1.8	5.7	124	10		8260	srh	1/27/99
p-Isopropyltoluene	<1.8	ug/l	1.8	5.7	ns	10		8260	srh	1/27/99
sec-Butylbenzene	<3	ug/l	3	9.5	ns	10		8260	srh	1/27/99
Styrene	<2.1	ug/l	2.1	6.7	10	10		8260	srh	1/27/99
tert-Butylbenzene	<2	ug/l	2	6.4	ns	10		8260	srh	1/27/99
Tetrachloroethene	11	ug/l	2.9	9.2	0.5	10		8260	srh	1/27/99
Toluene	8.7	ug/l	3.3	10	68.6	10	J	8260	srh	1/27/99
trans-1,2-Dichloroethene	19	ug/l	1.6	5.1	20	10		8260	srh	1/27/99
trans-1,3-Dichloropropene	<2	ug/l	2	6.4	0.02	10		8260	srh	1/27/99
Trichloroethene	792	ug/l	1.6	5.1	0.5	10		8260	srh	1/27/99
Trichlorofluoromethane	<3.4	ug/l	3.4	11	ns	10		8260	srh	1/27/99
Vinyl chloride	<2.1	ug/l	2.1	6.7	0.02	10		8260	srh	1/27/99

Sample Number: 13824 QC Prep Batch Number: 990154 Sample analyzed within: 2 Day(s) from collection.

Client ID: 990125WA09P Sample Description: grab Collection: 1/25/99 Time: 14:25

1,1,1,2-Tetrachloroethane	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
1,1,1-Trichloroethane	1.1	ug/l	0.2	0.7	40	1		8260	srh	1/27/99
1,1,2,2-Tetrachloroethane	<0.3	ug/l	0.3	0.9	0.02	1		8260	srh	1/27/99
1,1,2-Trichloroethane	<0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/27/99
1,1-Dichloroethane	<0.2	ug/l	0.2	0.5	85	1		8260	srh	1/27/99
1,1-Dichloroethene	<0.4	ug/l	0.4	1.1	0.7	1		8260	srh	1/27/99
1,1-Dichloropropene	<0.5	ug/l	0.5	1.6	ns	1		8260	srh	1/27/99
1,2,3-Trichlorobenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,2,3-Trichloropropane	<0.6	ug/l	0.6	1.9	ns	1		8260	srh	1/27/99
1,2,4-Trichlorobenzene	<0.2	ug/l	0.2	0.5	14	1		8260	srh	1/27/99
1,2,4-Trimethylbenzene	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/27/99
1,2-Dibromoethane	<0.2	ug/l	0.2	0.8	0.005	1		8260	srh	1/27/99
1,2-Dichlorobenzene	<0.2	ug/l	0.2	0.6	60	1		8260	srh	1/27/99
1,2-Dichloroethane	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/27/99

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

WDNR# 241340550

BATCH NUMBER: 990039
 DATE REPORTED: 29-Jan-99
 DATE RECEIVED: 26-Jan-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	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/27/99
1,3,5-Trimethylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,3-Dichlorobenzene	<0.2	ug/l	0.2	0.6	125	1		8260	srh	1/27/99
1,3-Dichloropropane	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,4-Dichlorobenzene	<0.2	ug/l	0.2	0.5	15	1		8260	srh	1/27/99
12Dibromo-3-chloropropan	<0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/27/99
2,2-Dichloropropane	<0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/27/99
2-Butanone (MEK)	<1.4	ug/l	1.4	4.4	90	1		8260	srh	1/27/99
2-Chloroethyl Vinyl Ether	<0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/27/99
2-Chlorotoluene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/27/99
4-Chlorotoluene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/27/99
4-Methyl-2-Pentanone	<0.8	ug/l	0.8	2.7	50	1		8260	srh	1/27/99
Acetone	<1.6	ug/l	1.6	4.9	200	1		8260	srh	1/27/99
Benzene	<0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/27/99
Bromobenzene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
Bromochloromethane	<0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/27/99
Bromodichloromethane	2.6	ug/l	0.3	0.8	0.06	1		8260	srh	1/27/99
Bromoform	<0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/27/99
Bromomethane	<0.2	ug/l	0.2	0.7	1	1		8260	srh	1/27/99
Carbon tetrachloride	<0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/27/99
Chlorobenzene	<0.2	ug/l	0.2	0.6	20	1		8260	srh	1/27/99
Chloroethane	<1.2	ug/l	1.2	3.7	80	1		8260	srh	1/27/99
Chloroform	5.5	ug/l	0.3	0.9	0.6	1		8260	srh	1/27/99
Chloromethane	<0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/27/99
cis-1,2-Dichloroethene	0.4	ug/l	0.2	0.6	7	1	J	8260	srh	1/27/99
cis-1,3-Dichloropropene	<0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/27/99
Dibromochloromethane	1.4	ug/l	0.2	0.7	6	1		8260	srh	1/27/99
Dibromomethane	<0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/27/99
Dichlorodifluoromethane	<0.4	ug/l	0.4	1.1	200	1		8260	srh	1/27/99
Ethylbenzene	<0.2	ug/l	0.2	0.5	140	1		8260	srh	1/27/99
Hexachlorobutadiene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
Isopropyl Ether	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/27/99
Isopropylbenzene	<0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/27/99
m&p-xylene	<0.4	ug/l	0.4	1.1	124	1		8260	srh	1/27/99
Methyl-t-butyl ether	<0.2	ug/l	0.2	0.7	12	1		8260	srh	1/27/99
Methylene chloride	<0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/27/99
n-Butylbenzene	<0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
n-Propylbenzene	<0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/27/99
Naphthalene	<0.5	ug/l	0.5	1.5	8	1		8260	srh	1/27/99
o-xylene	<0.2	ug/l	0.2	0.6	124	1		8260	srh	1/27/99
p-Isopropyltoluene	<0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
sec-Butylbenzene	<0.3	ug/l	0.3	1	ns	1		8260	srh	1/27/99
Styrene	<0.2	ug/l	0.2	0.7	10	1		8260	srh	1/27/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990039
 DATE REPORTED: 29-Jan-99
 DATE RECEIVED: 26-Jan-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	0.6	ns	1		8260	srh	1/27/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/27/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	1/27/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	1/27/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/27/99
Trichloroethene	0.8	ug/l	0.2	0.5	0.5	1		8260	srh	1/27/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/27/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/27/99

Sample Number: 13829

QC Prep Batch Number: 990154

Sample analyzed within 2 Day(s) from collection.

Client ID: trip blank

Sample Description:

Collection: 1/25/99 Time: 15:00

1,1,1,2-Tetrachloroethane	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
1,1,1-Trichloroethane	< 0.2	ug/l	0.2	0.7	40	1		8260	srh	1/27/99
1,1,2,2-Tetrachloroethane	< 0.3	ug/l	0.3	0.9	0.02	1		8260	srh	1/27/99
1,1,2-Trichloroethane	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/27/99
1,1-Dichloroethane	< 0.2	ug/l	0.2	0.5	85	1		8260	srh	1/27/99
1,1-Dichloroethene	< 0.4	ug/l	0.4	1.1	0.7	1		8260	srh	1/27/99
1,1-Dichloropropene	< 0.5	ug/l	0.5	1.6	ns	1		8260	srh	1/27/99
1,2,3-Trichlorobenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,2,3-Trichloropropane	< 0.6	ug/l	0.6	1.9	ns	1		8260	srh	1/27/99
1,2,4-Trichlorobenzene	< 0.2	ug/l	0.2	0.5	14	1		8260	srh	1/27/99
1,2,4-Trimethylbenzene	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/27/99
1,2-Dibromoethane	< 0.2	ug/l	0.2	0.8	0.005	1		8260	srh	1/27/99
1,2-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	60	1		8260	srh	1/27/99
1,2-Dichloroethane	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/27/99
1,2-Dichloropropane	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/27/99
1,3,5-Trimethylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,3-Dichlorobenzene	< 0.2	ug/l	0.2	0.6	125	1		8260	srh	1/27/99
1,3-Dichloropropane	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
1,4-Dichlorobenzene	< 0.2	ug/l	0.2	0.5	15	1		8260	srh	1/27/99
1,2-Dibromo-3-chloropropan	< 0.6	ug/l	0.6	1.9	0.02	1		8260	srh	1/27/99
2,2-Dichloropropane	< 0.4	ug/l	0.4	1.3	ns	1		8260	srh	1/27/99
2-Butanone (MEK)	< 1.4	ug/l	1.4	4.4	90	1		8260	srh	1/27/99
2-Chloroethyl Vinyl Ether	< 0.3	ug/l	0.3	0.9	ns	1		8260	srh	1/27/99
2-Chlorotoluene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/27/99
4-Chlorotoluene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/27/99
4-Methyl-2-Pentanone	< 0.8	ug/l	0.8	2.7	50	1		8260	srh	1/27/99
Acetone	< 1.6	ug/l	1.6	4.9	200	1		8260	srh	1/27/99
Benzene	< 0.2	ug/l	0.2	0.6	0.5	1		8260	srh	1/27/99
Bromobenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
Bromochloromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/27/99
Bromodichloromethane	< 0.3	ug/l	0.3	0.8	0.06	1		8260	srh	1/27/99

APL Environmental

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990039
DATE REPORTED: 29-Jan-99
DATE RECEIVED: 26-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
Bromoform	< 0.5	ug/l	0.5	1.5	0.44	1		8260	srh	1/27/99
Bromomethane	< 0.2	ug/l	0.2	0.7	1	1		8260	srh	1/27/99
Carbon tetrachloride	< 0.2	ug/l	0.2	0.7	0.5	1		8260	srh	1/27/99
Chlorobenzene	< 0.2	ug/l	0.2	0.6	20	1		8260	srh	1/27/99
Chloroethane	< 1.2	ug/l	1.2	3.7	80	1		8260	srh	1/27/99
Chloroform	< 0.3	ug/l	0.3	0.9	0.6	1		8260	srh	1/27/99
Chloromethane	< 0.8	ug/l	0.8	2.4	0.3	1		8260	srh	1/27/99
cis-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.6	7	1		8260	srh	1/27/99
cis-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.8	0.02	1		8260	srh	1/27/99
Dibromochloromethane	< 0.2	ug/l	0.2	0.7	6	1		8260	srh	1/27/99
Dibromomethane	< 0.4	ug/l	0.4	1.1	ns	1		8260	srh	1/27/99
Dichlorodifluoromethane	< 0.4	ug/l	0.4	1.1	200	1		8260	srh	1/27/99
Ethylbenzene	< 0.2	ug/l	0.2	0.5	140	1		8260	srh	1/27/99
Hexachlorobutadiene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
Isopropyl Ether	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/27/99
Isopropylbenzene	< 0.2	ug/l	0.2	0.5	ns	1		8260	srh	1/27/99
m&p-xylene	< 0.4	ug/l	0.4	1.1	124	1		8260	srh	1/27/99
Methyl-t-butyl ether	< 0.2	ug/l	0.2	0.7	12	1		8260	srh	1/27/99
Methylene chloride	< 0.8	ug/l	0.8	2.4	0.5	1		8260	srh	1/27/99
n-Butylbenzene	< 0.2	ug/l	0.2	0.7	ns	1		8260	srh	1/27/99
n-Propylbenzene	< 0.3	ug/l	0.3	0.8	ns	1		8260	srh	1/27/99
Naphthalene	< 0.5	ug/l	0.5	1.5	8	1		8260	srh	1/27/99
o-xylene	< 0.2	ug/l	0.2	0.6	124	1		8260	srh	1/27/99
p-Isopropyltoluene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
sec-Butylbenzene	< 0.3	ug/l	0.3	1	ns	1		8260	srh	1/27/99
Styrene	< 0.2	ug/l	0.2	0.7	10	1		8260	srh	1/27/99
tert-Butylbenzene	< 0.2	ug/l	0.2	0.6	ns	1		8260	srh	1/27/99
Tetrachloroethene	< 0.3	ug/l	0.3	0.9	0.5	1		8260	srh	1/27/99
Toluene	< 0.3	ug/l	0.3	1	68.6	1		8260	srh	1/27/99
trans-1,2-Dichloroethene	< 0.2	ug/l	0.2	0.5	20	1		8260	srh	1/27/99
trans-1,3-Dichloropropene	< 0.2	ug/l	0.2	0.6	0.02	1		8260	srh	1/27/99
Trichloroethene	< 0.2	ug/l	0.2	0.5	0.5	1		8260	srh	1/27/99
Trichlorofluoromethane	< 0.3	ug/l	0.3	1.1	ns	1		8260	srh	1/27/99
Vinyl chloride	< 0.2	ug/l	0.2	0.7	0.02	1		8260	srh	1/27/99

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

ORGANIC REPORT

WDNR# 241340550

BATCH NUMBER: 990039
DATE REPORTED: 29-Jan-99
DATE RECEIVED: 26-Jan-99
SAMPLE TEMP (C): Rec On Ice
PROJECT ID:
PROJECT NAME:

Compound	Result	Units	LOD	LOQ	PAL	Dil	RQ	Method	Analyst	Date Anal
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Approved By: James Chang, Ph.D. Date: 1/29/99
James Chang, Ph.D., Lab Director

MDL: Method Detection Limit determined by 40CFR Part 136 Appendix B "e" = Estimate value, over calibration range.

LOQ = $10 (S) \times \text{Dilution Factor}$, where "S" is the Standard Deviation from the MDL Study

LOD = $3.143 (S) \times \text{Dilution Factor}$, 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.