→ SER Casefile - ANNEX

URS

March 19, 2001

246004330
HW/Gum

Pat Brady
Wisconsin Department of Natural Resources
Bureau of Solid Waste Management
P.O. Box 7921
101 South Webster
Madison, WI 53707

Re: First Quarter 2001 Groundwater Monitoring Results
Cook Composites and Polymers, Saukville, WI
URS Project No.: 48362-001
WDNR FID No.: 03082

Dear Pat:

Attached is one copy of the data transmittal certification page and one data disk containing the results of the first quarter 2001 groundwater sampling for the Cook Composites and Polymers, facility in Saukville, WI.

Please contact me at URS's Milwaukee, Wisconsin office (414.831.4146) if there are any problems with the attached disk.

Sincerely,

Robert A. Cigale, P.G., CHMM
Senior Project Geologist

Attachment

cc: Kathy Thompson - WDNR Madison (with disk)
Michael Gromacki – CCP North Kansas City

URS Corporation
Milwaukee County Research Park
10200 Innovation Drive, Suite 500
Milwaukee, WI 53226
Tel: 414.831.4100
Fax: 414.831.4101

GROUNDWATER MONITORING DATA CERTIFICATION

[X] Check here to indicate that a copy of this page (and a copy of the exceedance notification letter, if any) was mailed to the DNR Regional Office.

The enclosed diskette contains data for the following facility or facilities:

License No.	Facility ID No.	Facility Name	Sample Results for Month(s) of:
246004330	03082	Cook Composites and Polymers Saukville, Wisconsin	January 2001

Check one of the following:

[ ] An exceedance notification and explanation *is attached.*
[X] An exceedance notification *is not attached* because there are no exceedances to report.

To the best of my knowledge, the information reported and the statements made on this diskette and enclosures are true and correct. *Furthermore, per ss. NR 140.24(1)(a) and 507.30, Wis. Adm. Code, I have attached notification of enforcement standard, preventive action limit, or alternative concentration limit exceedances, if any, which includes a list of the wells at which the exceedances occurred and a preliminary analysis of the cause and significance of the concentration.*

Signature

3/19/01
Date

Robert A. Cigale, P.G., CHMM
Senior Project Geologist

→ SER Casefile (ANNEX)

URS

March 2, 2001

Mr. Michael Gromacki
Cook Composites and Polymers
820 East 14th Avenue
North Kansas City, MO 64116

246004330
HW/GWM

Subject: FY 2000 Annual Groundwater Monitoring Report
Cook Composites and Polymers
340 Railroad Street
Saukville, Wisconsin
Project No. 11035-387

Dear Mike:

Enclosed is a copy of the FY 2000 Annual Groundwater Monitoring Report for the Cook Composites and Polymers facility located in Saukville, Wisconsin. The FY 2000 Annual Groundwater Monitoring Report summarizes the results of the four quarterly groundwater sampling events performed in the year 2000.

If you have any questions or comments regarding the attached report, please feel free to contact me at 414.831.4146.

Sincerely,

Robert A. Cigale, P.G., CHMM
Senior Geologist

RAC:rac

Enclosures

cc: Mr. Pat Brady - WDNR (1)
Mr. Franklin Schultz - WDNR (1)
Ms. Laura Lodisio - USEPA (2)
Mr. Christopher Lear - Village of Saukville (1)
Mr. Gary Maase - CCP (1)

URS Corporation
Milwaukee County Research Park
10200 Innovation Drive, Suite 500
Milwaukee, WI 53226
Tel: 414.831.4100
Fax: 414.831.4101

URS

2000 ANNUAL GROUNDWATER MONITORING REPORT

COOK COMPOSITES AND POLYMERS
340 RAILROAD STREET
SAUKVILLE, WISCONSIN

PREPARED FOR:
COOK COMPOSITES AND POLYMERS

March 2, 2001
URS Corporation

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Results of the sampling performed in 2000 indicated that volatile organic compounds (VOCs) are present in the groundwater in the glacial deposits and the shallow dolomite at concentrations of up to 151,199 µg/L, an increase over the maximum total VOC concentration observed in 1999. However, the 2000 results are 15 percent less than the concentrations observed in 1998. The residual sources of impacts present on the site continue to impact the groundwater within the glacial deposits and the shallow dolomite unit. However, VOC concentrations in the deep dolomite unit remain at non-detectable levels.

The groundwater extraction system currently operating on the site was designed to minimize the downward migration of impacts from the glacial drift and shallow dolomite units to the deep dolomite unit, and to control the off-site migration of the impacts within the glacial drift, shallow dolomite, and deep dolomite units.

Concentrations of VOCs at the perimeter monitoring wells remain at non-detectable to low levels. Groundwater surface contours and potentiometric surface plots indicate that there is a convergent groundwater flow on the site towards the active extraction system. A stable or decreasing plume size, as indicated by stable or decreasing concentrations observed in the perimeter monitoring wells, along with an increase in concentrations observed in the active extraction wells indicate that the extraction system is effectively controlling the off-site migration of the impacts, and is reducing the volume of impacts.

Toluene was detected with concentrations well below the Preventative Action Limit (PAL) in the sample collected from Municipal Well No. 1 (MW-01) during the summer sampling event. During the winter sampling event, chloroform was detected at a concentration below the PAL in the sample collected from Municipal Well No. 3 (MW-03). However, these contaminants were found only during the specified sampling event and not detected in the other three sampling events performed during the year 2000. All other municipal well samples in Saukville continue to exhibit no detection of the impacts present on the CCP site.

Maintenance on malfunctioning equipment performed on RC-1, RC-2, and RC-3 Ranney Collectors and many of the extraction wells decreased the number of samples collected. However, the maintenance was necessary to ensure a reliable groundwater extraction system. By the end of 2000, maintenance on the groundwater extraction system was complete, and the system was fully operational.

SECTIONONE Introduction

Cook Composites and Polymers Co. (CCP) operates a polyester, acrylic, and alkyd resin manufacturing plant in Saukville, Wisconsin (Figure 1). Prior to 1991, the plant was owned and operated by Freeman Chemical Corporation.

In compliance with the 1987 Corrective Action order on Consent (Docket #V-W-88-R-002), October 19, 1987, 3008h order for RCRA, CCP is required to perform quarterly groundwater monitoring for specific wells. Additional wells or sampling points are sampled on a semi-annual or annual basis.

Samples were collected from the Saukville facility in January, April, July, and October 2000 by URS Corporation (URS) personnel. The samples collected were analyzed by EnChem Laboratory of Madison, Wisconsin.

The field data and results of the chemical analyses were compiled by URS, and were submitted on a quarterly basis by CCP to the United States Environmental Protection Agency (USEPA) Region V, and the Wisconsin Department of Natural Resources (WDNR). Volatile organic compounds (VOC) exceedances of the Wisconsin Administrative Code Chapter NR 140 Preventative Action Limits (PAL) or Enforcement Standard (ES) were reported quarterly by CCP in accordance with NR 508. This report was prepared to summarize the results of the groundwater monitoring over the past year.

This document presents a summary of the data collected during the four quarterly groundwater sampling events at the CCP Saukville facility in 2000, and provides an evaluation of the groundwater elevation and quality trends at the site. The water quality data have been submitted to the USEPA and the WDNR in the quarterly reports. Copies of the summary tables included in each of the quarterly reports are included in Appendix A.

The contents of this report include the following:

- A summary of the groundwater elevations that were measured in the monitoring wells located both on- and off-site during 2000. Groundwater measurements are depicted on groundwater table and potentiometric surface maps for the glacial drift and shallow dolomite units, respectively.
- An evaluation of the groundwater flow directions in the glacial drift and the shallow dolomite hydrogeologic units, and the effects of the groundwater extraction system on the patterns of groundwater flow.
- A summary of the site groundwater monitoring program, and the quarterly total VOC concentrations by wells.
- Isoconcentration maps for total VOC s in groundwater in the glacial drift and shallow dolomite units.
- Time vs. concentration plots of total VOCs in groundwater in selected wells.
- An evaluation of the trends in groundwater quality for each of the monitoring groups for 2000.
- An evaluation of the effectiveness of plume containment by the on-site groundwater extraction system, based on groundwater flow and quality data.

3.1 DESCRIPTION OF HYDROGEOLOGIC UNITS

The geology at the site has been divided into three fairly distinct hydrogeologic units. These units include the unconsolidated glacial drift deposits, the shallow dolomite units consisting of the Silurian dolomite to approximately 100 ft below the ground surface, and the deep dolomite unit consisting of Silurian dolomite between approximately 100 ft and 700 ft below the ground surface. Detailed description of the three units are provided below.

3.1.1 Glacial Drift

The glacial drift unit consists of a complex succession of fill and glaciolacustrine deposits that is underlain by a glacial till. The lake deposits and other materials have been extensively used as fill on-site. Both the till and the glaciolacustrine deposits are considered to be part of a partially confining hydrostratigraphic unit.

The total thickness of the glacial drift typically varies between 10 and 30 ft in the vicinity of the site, but the glacial drift is generally on the order of 10 ft thick beneath the CCP facility. Glaciolacustrine deposits are up to 20 ft thick on the western side of the site, and consist of interbedded sands, silts and clays. The clay is soft to medium hard, gray, and plastic to slightly plastic. Between 5 and 25 ft of glacial till is present beneath the eastern side of the site. The till is composed of interbedded silty sands and sandy gravel. The sandy gravel varies from loose to very dense, is brown to gray, and is typically well-graded.

The stratigraphic order of the deposits from the ground surface is generally sand and silt overlying a laterally continuous layer of laminated silt and clay (glaciolacustrine deposits) above dense clay (glacial till). A thin layer of sand and gravel (glacial outwash) lies between this till unit and bedrock.

3.1.2 Shallow Dolomite

The glacial deposits are unconformably underlain by fractured, thinly to massive bedded Silurian dolomite, with a total thickness of approximately 600 ft in the area, which includes the deep dolomite aquifer.

The uppermost 100 ft of the Silurian dolomite in the Saukville area tends to have a lower permeability than the underlying deep dolomite aquifer. Occasionally, transmissive zones are encountered in the shallow dolomite, such as at monitoring well W-24A, which extracts groundwater at 40 gpm, and yet shows little drawdown.

3.1.3 Deep Dolomite

The deep dolomite aquifer is defined as the Silurian dolomite from approximately 100 to 700 ft below the ground surface. The dominant lithology in the deep dolomite aquifer in the Saukville area is the Racine Formation. Municipal wells within the study area are typically cased to approximately 100 ft below the ground surface, and are completed in the Silurian dolomite to depths in the range of 450 to 550 ft below the ground surface. Groundwater flow within the Silurian dolomite appears to be fracture controlled beneath the study area.

Several solution features have been identified in the dolomite on-site. An apparent sinkhole, filled with glacial deposits, which extends to a depth of approximately 200 ft below the ground surface was encountered on the eastern edge of the CCP site during the installation of wells W-3A, W-3B, and W-20. The areal extent of the sinkhole was further defined based on the seismic refraction survey performed by Minnesota Geophysical Associates. Further evidence of the karstic features includes solution enlarged joints in the dolomite observed during the borehole video logging of W-30. These observations, coupled with the hydraulic response of the aquifer during pumping tests in Saukville, suggest that groundwater flow in the Silurian dolomite is fracture controlled in the study area.

3.2 GROUNDWATER LEVELS AND FLOW PATTERNS IN 2000

Groundwater levels in the monitoring wells were measured prior to purging and sampling during each of the quarterly sampling events. Table 1 presents a summary of the water level measurements for each quarter, and Figure 2 shows the locations of the monitoring wells. The water level data collected in 2000 was used to develop quarterly water table maps for the glacial drift unit, and quarterly potentiometric surface maps for the shallow dolomite unit. These maps are attached as Figures 3 through 10 at the end of this report.

Groundwater elevations on-site appear to be influenced by the groundwater extraction system active on the site. A total of 9 glacial drift wells, 4 shallow dolomite wells, and one deep dolomite well are actively pumped in an effort to contain the plume of impacts. Table 2 provides a summary of the monthly pump running times.

3.2.1 Glacial Drift Hydrogeologic Unit

The water table occurs in the glacial drift unit, as shown on Figures 3 through 6. The depth to the water table at the site is approximately 10 ft below the ground surface. Water table elevations appear to be higher in the spring, possibly due to increased recharge resulting from melting snow and increased rainfall. Well W-20 is constructed as a piezometer within the glacial

drift present in the sinkhole identified in the northeast corner of the site, and the hydraulic head within this well is representative of groundwater flow in the shallow dolomite unit. Therefore, water levels from well W-20 were not used to construct the water table maps included as Figures 3 to 6, but have been used to construct the potentiometric surface maps for the shallow dolomite unit as shown on Figures 7 to 10. The water table beneath the CCP facility generally slopes from the southwest to the northeast, towards the Milwaukee River, with a hydraulic gradient of approximately 0.02 ft/ft, based on the Summer 2000 water level data attached in Appendix A. However, on-site shallow groundwater flow is diverted towards the Ranney Collectors and the active on-site remediation network.

Groundwater elevation trends from 1995 to 2000, for the water table monitoring wells, are included in Appendix B. The water levels tend to follow a general trend where increases are observed during the Spring quarters and decreases are observed during the Fall and Winter quarters. The water levels measurements continue to indicate that dewatering of the on-site glacial deposits is occurring, and that the on-site extraction system is controlling off-site migration of groundwater in the glacial drift.

A vertically downward hydraulic gradient continues to be present between the glacial drift and the shallow dolomite aquifers. The magnitude of the downward gradient was determined using the July 2000 water level data for wells W-18A/W-22, and W-43/W-38. Downward gradients ranged between 0.3 and 0.9 ft/ft. Hydrogeological calculations are included in Appendix C.

3.2.2 Shallow Dolomite Unit

The potentiometric surface in the shallow dolomite unit for the 2000 sampling events is shown on Figures 7 to 10. The piezometers constructed at the site have been completed at varying depths in the dolomite. Therefore, only those piezometers with bottom elevations between 680 and 710 ft above mean sea level (MSL) were used in preparation of Figures 7 to 10. Well W-30 has a bottom elevation of approximately 215 MSL, and is utilized to provide non-contact cooling water extracted from both the shallow and deep dolomite units. W-30 typically pumps at approximately 340 gpm, and has induced a large cone of depression in the shallow dolomite unit. Therefore, W-30 has been included on the potentiometric maps for the shallow dolomite unit.

Groundwater elevation trends from 1995 to 2000, for the shallow dolomite monitoring wells, are included in Appendix B. The water levels tend to follow a general trend where increases are observed during the Spring quarters and decreases are observed during the Fall and Winter quarters. The water levels measurements continue to indicate that there is convergent flow

within the shallow dolomite unit towards the extraction wells, and that the on-site extraction system is controlling off-site migration of groundwater in the glacial drift.

3.2.3 Deep Dolomite Unit

Based on the results of the groundwater modeling conducted during the RCRA Facility Investigation (RFI), groundwater flow in the deep dolomite unit in the Saukville area is towards well W-30, and the active Saukville municipal wells. Only one on-site data point (W-30) is available to document flow directions in the deep dolomite unit. Therefore, there is insufficient data to prepare potentiometric surface maps for the deep dolomite unit. However, groundwater on the site exhibits a strong downward flow from the glacial deposits and the shallow dolomite unit to the deep dolomite unit.

4.1 PROGRAM DESCRIPTION

The groundwater monitoring program at the CCP Saukville facility includes 42 monitoring points consisting of 19 glacial drift wells, 11 shallow dolomite wells, 6 deep dolomite wells, 3 Ranney Collectors, and 3 sample points at the Saukville publicly owned treatment works (POTW). The monitoring points are further grouped according to 4 sampling objectives: receptor points, perimeter monitoring points, remediation progress points, and groundwater elevation monitoring points. The organization of the monitoring wells by monitoring objective is summarized in Table 3.

Receptor monitoring points include 4 municipal water supply wells (MW-1, MW-2, MW-3, and MW-4), POTW influent, effluent, and sludge samples, and the Ranney Collectors. The Ranney Collectors are essentially french drains which intercept shallow groundwater, and discharge to the sanitary sewer system. The results of the analyses performed on the samples collected from the Ranney Collectors provide a portion of the data necessary to calculate VOC extraction rates.

Perimeter monitoring points include monitoring wells which are located both on-site and off-site at or beyond the edge of the VOC plume. These monitoring points provide necessary information to define the extent of the plume.

Remediation progress points are monitoring wells which are located within the VOC plume. These wells provide an indication regarding the effectiveness of the on-site pumping wells.

Each of these sets of monitoring points is further subdivided into glacial drift, shallow dolomite, and deep dolomite hydrogeologic units. This subdivision allows for more effective evaluation of the on-site groundwater flow and quality trends.

4.2 CHANGES IN MONITORING NETWORK

No changes to the monitoring network were made in 2000. W-29 was not sampled during any sampling event due to maintenance to that well. A new pump was installed in the well and a sampling port was not originally installed in the rebuilt wellhead. A sampling port has subsequently been installed and W-29 will be sampled in 2001.

4.3 SAMPLING SCHEDULE

Table 3 presents the sampling schedule that was developed for the 2000 groundwater monitoring, along with the analytical methods used each quarter. The methods and associated parameters are listed in Table 4. The Ranney Collectors and the remediation progress wells were only analyzed

for the volatile organic compounds listed under EPA Method SW846-8021. Samples collected from the monitoring wells, municipal wells, and the POTW sampling points were analyzed for volatile organic compounds under EPA Method SW846-8260A. In addition, selected wells were analyzed during the summer sampling event (annual sampling event) for parameters detected during the Appendix IX monitoring, conducted during the RFI. These additional parameters include semi-volatile organic compounds (EPA Method SW846-8270B), polychlorinated biphenyls (EPA Method SW846-8080), arsenic (EPA Method SW846-7060), and barium (EPA Method SW846-6010).

5.1 TOTAL VOC DATA

The tabulated results of the VOC concentrations in each well and the supporting laboratory data were presented in each of the four quarterly reports (URS, 2000b to 2000e). Copies of the result summary tables included in each of the quarterly reports have been attached in Appendix A. Tables 5, 6, and 7 present a summary of total VOC concentrations in each of the wells for the four quarters. The wells are organized by monitoring objective and hydrogeologic unit as previously described in Section 4 and Table 3. Figure 2 shows the locations of the monitoring wells on and off-site.

The lateral distribution of VOCs in the glacial drift, and the shallow dolomite unit for 2000 is depicted on the isoconcentration maps (Figures 11 and 12). The isoconcentration maps were constructed using VOC concentration data from the annual and semi-annual sampling events in 2000. Results on the semi-annual sampling events were within the same order of magnitude. Therefore, an average concentration was utilized to construct the isoconcentration maps.

5.1.1 VOC Patterns in the Glacial Drift Unit

The distribution of VOCs in the glacial drift unit for 2000 is depicted on the isoconcentration map included as Figure 11. As discussed in Section 3, Monitoring Well W-20 is completed in the glacial drift deposit within the sinkhole in the shallow dolomite unit, and therefore, the results obtained from W-20 are more representative of the water quality in the shallow dolomite aquifer. Isoconcentration contours in the glacial drift unit do not include total VOC concentrations in the Ranney Collectors. The Ranney Collector samples are composite groundwater samples that are collected from broad areas of the site through radial collection lines.

The distribution of VOCs in the groundwater in the glacial drift in 2000 (Figure 11) is generally similar to the distribution observed in the past. The horizontal extent of the plume remains generally the same as that observed in 1999. Total VOC concentrations have increased at W-6A, W-43 and W-47, while the total VOC concentration at W-42 and W-41 have decreased slightly. These concentration variances could be due to seasonal fluctuations in combination with the on-site remediation system drawing the impacts in the glacial drift towards the extraction wells. Results indicate that the plume of contaminants continue to be confined to the site. Impacts have been detected off-site to the west (upgradient) at the Saukville Feed Supply. The Saukville Feed Supply site is an active leaking underground storage tank (LUST) site.

5.1.2 VOC Patterns in the Shallow Dolomite Unit

Total VOC concentrations in the groundwater in the shallow dolomite unit for 2000 are shown on Figure 12. The concentration and distribution of VOCs in the groundwater are similar to those observed in 1999, with the exception of the results from W-21A.

The total VOC concentration at W-21A has increased from 7,615 µg/L in 1999 to 17,876 µg/L in 2000. W-21A is an extraction well for the on site remediation system. The increasing total VOC concentration trends observed in W-21A are due to the effectiveness of the on site groundwater remediation system drawing in the contaminant.

5.2 NR 140 PAL AND ES EXCEEDANCES

Wisconsin Administrative Code (WAC) Chapter NR 140 Preventative Action Limits (PALs) and Enforcement Standards (ESs) were exceeded in a total of 12 monitoring wells during 2000. Monitoring Wells W-23 and W-27 had PAL and ES exceedances during the spring sampling event and W-20 and W-27 had PAL and ES exceedances during the fall sampling event. The exceedances observed in W-20, W-23, and W-27 were attributed to chlorinated solvents which have never been used at the CCP facility.

Monitoring Wells W-06A, W-21A, W-24A, W-28, W-30, W-38, W-41, W-42, W-43, and W-47 had PAL and ES exceedances in samples collected during the annual sampling event in July 2000. It should be noted that all of the wells exhibiting exceedances during the annual sampling event are located within the plume of impacts. The concentrations observed in 2000 are similar to those observed in 1999.

5.3 VOC TRENDS BY MONITORING OBJECTIVE

This section describes the trends in total VOC concentrations for each of the monitoring objectives. Total VOC concentrations in groundwater versus time plots for selected wells are included in Appendix D. The discussion that follows is organized by monitoring objective (receptor, perimeter, remediation progress), and for each monitoring objective, by the hydrogeologic unit (glacial drift, shallow dolomite, deep dolomite).

5.3.1 Receptor Monitoring

Receptor monitoring points are sampled on a quarterly basis.

5.3.1.1 Ranney Collectors and POTW

Total VOCs were monitored in 2000 in the shallow groundwater that was discharged from the Ranney Collectors (RC-1, RC-2, and RC-3), and in the influent, sludge, and effluent samples collected from the Village of Saukville POTW. These analyses were performed to monitor the concentrations and character of impacts leaving the CCP facility, associated dilution of these impacts prior to treatment at the POTW, and concentration and character of POTW effluents.

The total VOCs detected in 2000 are summarized in Table 5. The total VOC concentrations detected in the samples collected from the Ranney Collectors are somewhat variable. The variation in total VOC concentrations observed is most likely due to seasonal precipitation and infiltration variations. Total VOC concentrations in the Ranney Collectors in 2000 remained below 3,000 µg/L.

The discharges from the Ranney Collectors are mixed with wastewater from several sources prior to arrival at the POTW. Total VOC concentrations detected in the POTW influent, sludge, and effluent are also summarized in Table 5. Total VOC concentrations in the POTW influent were typically between 47 µg/L and 163 µg/L. However, a spike in the total VOC concentrations was observed in the spring sampling event when the total VOC concentration was 293 µg/L. Based on previous years of data, when the POTW influent total VOC concentrations are compared to the total concentration of VOCs discharged from the Ranney Collectors, it appears that dilution of the VOCs in the Ranney Collector discharges are occurring prior to reaching the POTW.

Total VOC concentrations observed in the POTW sludge ranged between 12 and 1007 µg/L. The total VOC concentrations observed in the POTW sludge were typically attributed mostly to toluene and acetone.

The total VOC concentrations observed in the POTW effluent ranged between 0 and 1.3 µg/L. Total VOC concentrations in the POTW effluent were comprised of tetrachloroethene during the spring sampling event, and bromodichloromethane and chloroform during the summer sampling event, and toluene during the fall sampling event.

5.3.1.2 Municipal Wells (Deep Dolomite Wells)

All of the municipal wells were sampled according to the schedule discussed earlier with the exception of MW-03 not being sampled during the spring sampling event due to well maintenance. Chloroform was detected in MW-03 during the winter sampling event with a concentration below the PAL. Toluene was detected in MW-01 during the summer sampling event with a concentration below the PAL. Both of these concentrations were estimates between

the Limit of Detection and the Limit of Quantitation. Neither of these parameters were detected in subsequent sampling events. No VOCs were detected in MW-02 and MW-04 during the 2000 sampling events.

5.3.2 Perimeter Monitoring

Perimeter monitoring points are sampled on a semi-annual basis in April and October to determine whether the plume of impacts have migrated off the site.

5.3.2.1 Glacial Drift Wells

VOC concentrations in the perimeter monitoring wells screened in the glacial drift in 2000 were generally at non-detectable levels, with the exception of wells W-20 and W-27. As in previous years, W-27 concentrations of trichloroethene and 1,2-dichloroethene exceed the NR 140 ES and PAL. Monitoring well W-20 exceeded the ES and PAL of vinyl chloride in the fall sampling event, but was not detected in the spring event. As mentioned earlier in this report, chlorinated solvents have never been utilized at the CCP facility. Well W-27 is located upgradient of the facility, and detections of chlorinated solvents are likely due to past trichloroethene (TCE) handling and spills at the former Northern Signal, formerly located immediately west of the CCP property.

5.3.2.2 Dolomite Wells

Perimeter wells screened in the dolomite generally contained less than 1 µg/L of total detectable VOCs, with the exception of W-23 which contained 13 µg/L in the spring sampling event. Exceedances to the ES for vinyl chloride and benzene were detected in W-23 in the spring sampling event, and an exceedance to the ES for benzene was detected in W-23 in the fall sampling event. Well W-23 has a history of low-level VOC concentrations. Total VOC concentrations in the Perimeter Monitoring Wells are summarized in Table 6.

5.3.3 Remediation Progress Wells

5.3.3.1 Glacial Drift Wells

The remediation progress wells screened in the glacial drift unit are sampled on an annual basis to determine the status of the plume of impacts. In general, the total VOC concentrations observed in 2000 were consistent with the historical ranges. Total VOC concentrations ranged between 0.5 µg/L and 151,199 µg/L in 2000. A summary of the total VOCs detected in 2000 is presented in Table 7.

Several of the remediation progress wells screened in the glacial drift exhibited concentrations of several parameters in exceedance of the PALs and ESs. Specifically, well W-06A exhibited PAL exceedances for arsenic, naphthalene, 1,1-dichloroethene, methylene chloride, tetrachloroethene, and trichloroethene and ES exceedances for acetone, benzene, cis-1,2-dichloroethene, ethylbenzene, toluene, vinyl chloride and xylenes; well W-41 had an ES exceedance for benzene; well W-42 had ES exceedances for benzene, ethylbenzene, and xylene; well W-43 had PAL exceedances for barium, toluene, and xylenes and ES exceedances for arsenic, napthalene, acetone, benzene, ethylbenzene, and bis(2-ethylhexyl)phthalate; and well W-47 had PAL exceedances for arsenic, 1,2-dichloroethane, trichloroethene, and napthalene and ES exceedances for aroclor 1248, bis(2-ethylhexyl)phthalate, acetone, benzene, cis-1,2-dichloroethene, ethylbenzene, toluene, vinyl chloride, and xylene.

5.3.3.2 Dolomite Wells

Total VOC concentrations in the remediation progress wells screened in the dolomite were within ranges established in the past. A summary of the total VOCs is presented in Table 7.

Five of the remediation progress wells screened in the shallow dolomite had concentrations of various VOCs in exceedance of the PAL or ES. Well W-21A exhibited exceedances to the PAL for arsenic, naphthalene, 1,2-dichloroethane, and styrene and ES exceedances for, bis(2-ethyl)pthalate, benzene, ethylbenzene, and xylene; well W-24A exhibited a PAL exceedance for cis-1,2-dichloroethene, and trichloroethene and ES exceedances for benzene, and vinyl chloride; well W-28 exhibited a PAL exceedance for benzene and an ES exceedance for vinyl chloride; well W-30 exhibited an ES exceedance for benzene; and well W-38 exhibited a PAL exceedance for xylene and an ES exceedance for benzene.

5.4 APPENDIX IX RESULTS

In accordance with the WDNR requirement, seven remedial progress wells were analyzed during the annual sampling event in July 2000 for the non-VOC Appendix IX parameters detected during the October 1994 sampling event and during the January 1995 confirmatory sampling. A listing of the parameters is included on Table 8. Each of the wells sampled for Appendix IX parameters is located near the center of the groundwater plume.

Non-VOC Appendix IX parameters detected during the 2000 annual sampling event included: 1,4-dioxane, 2,4-dimethylphenol, 2-methylphenol, 4-methylphenol, acetophenone, naphthalene, phenol, 1,2-dichlorobenzene, 2-methylnaphthalene, phenanthrene, bis(2-ethylhexyl)phthalate, arsenic, and barium. The metals detected may be related to naturally occurring elements.

Naphthalene, bis(2-ethylhexyl)phthalate, arsenic, and barium were detected at concentrations in exceedance of their respective PAL or ES.

As discussed in earlier sections of this report, well W-06A exhibited PAL exceedances for naphthalene and arsenic. The results from the 2000 sampling event are within the historical ranges observed in well W-06A. Well W-21A exhibited PAL exceedances for naphthalene and arsenic. Results from the 2000 sampling event are within the historical ranges observed in W-21A. W-43 exhibited ES exceedances for naphthalene, bis(2-ethylhexyl)phthalate, and arsenic. W-47 exhibited a PAL exceedance for arsenic and naphthalene. The presence of the arsenic in the groundwater samples is believed to be due to natural concentrations of arsenic in the soils, and not due to operations at the site.

5.5 OFF-SITE INVESTIGATIONS

A subsurface investigation was performed in 1999 at the Saukville Feed Supply site located immediately upgradient to the site. The Saukville Feed Supply site is an active LUST site. Results of this investigation indicate elevated concentrations of lead, isopropylbenzene, n-butylbenzene, n-propylbenzene, naphthalene, p-isopropyltoluene, s-butylbenzene, 1,2,4-trimethylbenzene, and 1,3,5-trimethylbenzene in the soils on the Saukville Feed Supply site. The groundwater results indicate elevated concentrations of toluene in the groundwater.

The discussions in this section combine groundwater flow and quality trends from the receptor, perimeter, and remediation progress wells in the glacial drift and dolomite, to present an evaluation of the effectiveness of the plume containment in the remedial system at the Saukville site.

6.1 GLACIAL DRIFT UNIT

Portions of the glacial unit in the area of the Ranney Collectors appear to be dewatered. This fact, along with the nearly non-detectable concentrations of VOCs in the perimeter wells (Figure 11), indicate that the off-site migration of contaminated groundwater within the glacial drift unit is being effectively controlled.

6.2 SHALLOW DOLOMITE UNIT

For the past several years, VOC concentrations in the shallow dolomite unit have remained relatively stable, or decreased in the remediation progress wells. In 2000, total VOC concentrations in the shallow dolomite remediation progress wells ranged between 83 and 17,876 µg/L. Shallow dolomite perimeter monitoring wells continue to exhibit total VOC concentrations of less than 1 µg/L, with the exception of the spring sampling of W-23 with total VOC concentrations of 13 µg/L. The remediation system has dewatered an elliptically shaped area in the vicinity of wells W-30 and W-21A, as shown on Figures 7 through 10. The high capacity (300 gpm) pumping from W-30 has resulted in the dewatering of a large area of the glacial till unit and the shallow dolomite unit, thereby reducing the hydraulic connection between these two units in the affected area. The dewatering of the glacial till and shallow dolomite has reduced the quantity of contaminants which can migrate downward from the glacial till to the shallow dolomite. Based on the steep gradients associated with the cone of depression around W-30, the reduction in total VOC concentration observed in the shallow dolomite remediation progress wells, and the continued nearly non-detectable concentrations of VOCs in the shallow dolomite perimeter monitoring wells, indicate that migration of the contaminant plume in the shallow dolomite is being effectively contained and controlled.

6.3 DEEP DOLOMITE UNIT

VOC concentrations in the deep dolomite receptor (municipal) wells MW-2 and MW-4 have remained below detectable levels in 2000. Municipal wells MW-1 and MW-3 had low concentrations of toluene and chloroform detected during the summer and winter sampling events, respectively. Low level concentrations of toluene continue to be detected in PW-08,

located upgradient to the CCP facility, in 2000. VOC concentrations observed in W-30 in 2000 increased slightly over the concentrations observed in 1999, showing that the continuous pumping is drawing in the contaminants and controlling off-site migration.

The convergent flow observed around W-30, along with the relatively stable total VOC concentrations in the extracted groundwater, and the continued low to non-detectable concentrations of VOCs in the municipal wells indicate that the migration of the impacted groundwater in the deep dolomite aquifer is being effectively controlled by on-site pumping.

6.4 HYDRAULIC COMMUNICATION BETWEEN AQUIFERS

Groundwater elevation data indicates that downward seepage is occurring from the source areas in the glacial drift into the shallow dolomite through fractures in the upper portions of the bedrock. However, high capacity pumping has created dewatered zones within the glacial drift and shallow dolomite units, reducing the potential for vertical migration of the contaminants from the glacial drift to the shallow dolomite.

The purpose of the quarterly groundwater sampling program is to document the effectiveness of the remediation system to: 1) control the off-site migration of impacts; and, 2) to reduce the volume of contaminants in the groundwater. The results of the quarterly groundwater sampling performed in 2000, as summarized in this annual report, indicate that the existing remediation system operating at the CCP Saukville facility continues to effectively control off-site migration of the contaminant plume while effectively reducing the volume of contaminants present in the groundwater. Discharges from the site are low in concentration upon arriving at the Saukville POTW and remaining impacts are effectively removed in the treatment process prior to discharge from the POTW.

Based on the data collected in 2000, we recommend that no changes be made to the remediation system operating at the CCP Saukville facility, and that quarterly groundwater monitoring be continued to document the progress and effectiveness of the remedial system.

URS Greiner Woodward Clyde. 1999a. 1998 Annual Groundwater Monitoring Report. April 1999.

URS Corporation. 2000a. 1999 Annual Groundwater Monitoring Report. March 2000.

URS Corporation. 2000b. Groundwater Monitoring Results - 2000 Winter Quarter. March 1999

URS Corporation. 2000c. Groundwater Monitoring Results - 2000 Spring Quarter. June 1999.

URS Corporation. 2000d. Groundwater Monitoring Results - 2000 Summer Quarter. October 2000.

URS Corporation. 2000e. Groundwater Monitoring Results – 2000 Fall Quarter. January 2001.

TABLE 1
SUMMARY OF WATER LEVELS, 2000 (FEET, MSL)
COOK COMPOSITES AND POLYMERS

GEOLOGIC UNIT	WELL ID	Jan-00	Apr-00	Jul-00	Oct-00
Glacial	W-1A	756.28	758.28	764.98	759.55
Glacial	W-3B	734.64	733.12	742.54	736.51
Glacial	W-4A	NM	756.57	753.54	753.10
Glacial	W-6A	764.56	766.19	765.86	766.11
Glacial	W-8R	744.78	745.61	745.60	745.58
Glacial	W-14B	761.75	765.26	765.37	765.22
Glacial	W-16A	Dry	Dry	758.36	753.66
Glacial	W-18A	765.87	767.52	768.24	767.30
Glacial	W-19A	763.22	766.34	767.81	767.69
Glacial	W-20	730.50	728.33	740.03	731.96
Glacial	W-27	766.38	768.06	768.14	768.03
Glacial	W-37	Well Abandoned August 2, 1996			
Glacial	W-41	758.16	760.41	761.43	760.36
Glacial	W-42	755.59	758.35	759.09	758.54
Glacial	W-43	NM	760.00	760.46	759.00
Glacial	W-44	NM	754.75	NM	NM
Glacial	W-45	Dry	752.36	750.64	NM
Glacial	W-46	NM	761.85	762.23	762.15
Glacial	W-47	757.26	759.28	760.34	759.43
Glacial	W-48	762.10	762.10	762.23	762.04
Shallow Dolomite	W-3A	733.88	732.20	742.08	735.61
Shallow Dolomite	W-7	742.07	743.30	744.98	743.89
Shallow Dolomite	W-21A*	NM	760.89	NM	694.04
Shallow Dolomite	W-22	728.01	729.97	730.57	730.15
Shallow Dolomite	W-23	737.27	736.53	743.49	738.71
Shallow Dolomite	W-24A*	NM	755.01	755.71	755.23
Shallow Dolomite	W-25	Well Abandoned July 29, 1997			
Shallow Dolomite	W-28*	NM	699.53	709.98	707.12
Shallow Dolomite	W-29*	NM	NM	NM	NM
Shallow Dolomite	W-38	NM	748.58	750.41	750.07
Shallow Dolomite	W-39	756.00	757.55	759.14	758.15
Shallow Dolomite	W-40	737.80	736.60	740.87	739.67
Deep Dolomite	MW-1	676.00	678.00	NM	680.00
Deep Dolomite	MW-2	NM	NM	NM	NM
Deep Dolomite	MW-3	553.00	569.00	NM	574.00
Deep Dolomite	MW-4	668.00	669.00	NM	671.00
Deep Dolomite	PW-08	731.38	734.08	741.38	740.22
Deep Dolomite	W-30*	681.52	630.70	718.48	626.08

* = Extraction Well
NM = not measured

TABLE 2
SUMMARY OF WELL RUNNING TIMES
COOK COMPOSITES AND POLYMERS CO.

Hydrogeologic Unit	Well ID	Monthly Running Times (hours)												Annual Total (hours)	Percent of Total Available	Comments
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.			
Glacial Drift	W-31	0	0	0	0	0	0	0.2	0	0.2	0	0	0	0.4	0.0%	Dewatering of glacial drift due to pumping at RC-2 has affected shallow groundwater elevations.
	W-32	0	0	0	0	0	0	0	2.1	1.6	1.5	0.3	1	6.5	0.1%	Dewatering of glacial drift due to pumping at RC-2 has affected shallow groundwater elevations.
	W-33	8.3	9.2	17.6	10.1	8	8.1	535	796.9	602.3	675.8	229.4	0	2900.7	33.1%	Dewatering of glacial drift due to pumping at RC-2 has affected shallow groundwater elevations.
	W-34	667.6	642.8	839.5	672.4	837.6	675.8	670.6	801.6	628.1	675.9	840.6	669.7	8622.2	98.4%	Continued pumping assists in controlling off-site migration of contaminants within the glacial drift.
	W-35	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0%	Dewatering of glacial drift due to pumping at RC-2 has affected shallow groundwater elevations.
	RC-1	194.5	339.3	0	0	0	0	0	0	0	59	18.9	11	622.7	7.1%	Pumping has created some dewatering of the glacial drift. Maintenance issues affected pumping times.
	RC-2	0	0	0	0	0	0.1	0	472.7	8.4	598.6	840.6	670.5	2590.9	29.6%	Pumping has created some dewatering of the glacial drift. Maintenance issues affected pumping times.
	RC-3	0	57.6	40	127.5	427.6	278	314.7	218.3	241.4	66.7	72.8	26.8	1871.4	21.4%	Pumping has created some dewatering of the glacial drift.
Shallow Dolomite	W-21A	668.6	487	335.6	679.5	836.1	677.5	669.9	840.7	667.2	660.5	726.3	669	7917.9	90.4%	Pumping is contributing to the creation of a large dewatered zone within the shallow dolomite.
	W-24A	4.8	4.7	6.5	6	6.7	5.6	5.1	7.3	5.7	5.5	7.5	6.1	71.5	0.8%	Continued pumping assists in controlling off-site migration of contaminants within the shallow dolomite.
	W-28	377.6	227	161.5	103.5	745.2	677.5	669.6	737.4	8.9	0	30.6	0.7	3739.5	42.7%	Continued pumping assists in controlling off-site migration of contaminants within the shallow dolomite.
	W-29	63.2	40.7	42.4	34.4	43.6	35.5	34.9	44.1	35.1	34.9	43.6	33.7	486.1	5.5%	Continued pumping assists in controlling off-site migration of contaminants within the shallow dolomite.
Deep Dolomite	W-30	Pump runs continuously to provide approximately 300 gpm of non-contact cooling water.														

TABLE 3

SUMMARY OF 2000 GROUNDWATER SAMPLING PROGRAM
COOK COMPOSITES AND POLYMERS CO.

Monitoring Objective/ Well Group	Unit Monitored	Sampling Point	Sampling Frequency and EPA Method Number		
			Quarterly	Semiannually[1]	Annually[2]
Receptor	Glacial Drift	RC-1	8021/8260[3]		
		RC-2	8021/8260[3]		
		RC-3	8021/8260[3]		
	Deep Dolomite	MW-1	8260		
		MW-2			8260
		MW-3	8260		
		MW-4	8260		
	POTW	POTW-I	8260		
		POTW-E	8260		
		POTW-S	8260		
Perimeter	Glacial Drift	W-01A		8260	
		W-03B		8260	
		W-04A		8260	
		W-08R		8260	
		W-20		8260	
		W-27		8260	
	Shallow Dolomite	W-03A		8260	
		W-07		8260	
		W-22		8260	
		W-23		8260	
		W-25[5]			
	Deep Dolomite	PW-08		8260	
Remediation Progress	Glacial Drift	W-06A			APP IX 8260, 8270, 7060, 6010
		W-19A			8021
		W-37[6]			
		W-41			8021

TABLE 3 (CONTINUED)

SUMMARY OF 2000 GROUNDWATER SAMPLING PROGRAM
COOK COMPOSITES AND POLYMERS CO.

Monitoring Objective/ Well Group	Unit Monitored	Sampling Point	Sampling Frequency and EPA Method Number		
			Quarterly	Semiannually[1]	Annually[2]
		W-42			8021
		W-43			APP IX 8260, 8270, 7060, 6010
		W-47			APP IX 8260, 8270, 7060, 6010, 8081
	Shallow Dolomite	W-21A			APP IX 8260, 8270, 7060, 6010
		W-24A			APP IX 8260, 8270, 7060, 6010
		W-28			APP IX 8260, 8270, 7060, 6010
		W-29			APP IX 8260, 8270, 7060, 6010
		W-38			8021
	Deep Dolomite	W-30			APP IX 8260, 8270, 7060, 6010
Groundwater elevation monitoring	Glacial Drift	W-14B	Quarterly water level measurements only		
		W-16A	Quarterly water level measurements only		
		W-18A	Quarterly water level measurements only		
		W-44	Quarterly water level measurements only		
		W-45	Quarterly water level measurements only		
		W-46	Quarterly water level measurements only		
		W-48	Quarterly water level measurements only		
	Shallow Dolomite	W-39	Quarterly water level measurements only		
		W-40	Quarterly water level measurements only		

NOTES

1. Semiannual samples are collected in April and October.
2. Annual samples are collected in July.
3. Sampls are analyzed using Method 8260.
4. MW-2 is only monitored on an annual basis.
5. W-25 was abandoned in July 1997.
6. W-37 was abandoned in August 1996.

TABLE 4

SUMMARY OF ANALYTES AND METHODS
COOK COMPOSITES AND POLYMERS CO.

Volatile Organic Compounds by Method 8260		
Chloroethane	1,1,1-Trichloroethane	2-Hexanone
Chloromethane	Carbon Tetrachloride	4-Methyl-2-Pentanone
Bromomethane	Vinyl Acetate	Tetrachloroethene
Vinyl Chloride	Bromodichloromethane	Toluene[1]
Methylene Chloride	1,1,2,2-Tetrachloroethane	Chlrorbenzene[1]
Acetone	1,2-Dichloropropane	Ethylbenzene[1]
Carbon Disulfide	trans-1,2-Dichloropropene	Styrene
1,1-Dichloroethene	Trichloroethene	Xylenes (total)[1]
1,1-Dichloroethane	Dibromochloromethane	1,4-Dichlorobenzene[1]
1,2-Dichloroethene (total)	1,1,2-Trichloroethane	1,3-Dichlorobenzene[1]
Chloroform	Benzene	1,2-Dichlorobenzene[1]
1,2-Dichlroethane	cis-1,3-Dichloropropene	
2-Butanone	Bromoform	

Aromatic Volatile Organics by Method 8021[1]
Benzene
Toluene
Ethylbenzene
Chlorobenzene
Xylenes (total)
1,4-Dichlorobenzene
1,3-Dichlorobenzene
1,2-Dichlorobenzene

Semivolatile Organic Compounds by Method 8270[2]
1,4-Dioxane
2,4-Dimethylphenol
2-Methylnaphthalene
2-Methylphenol
4-Methylphenol
Acetophenone
bis(2-ethylhexyl)phthalate
Naphthalene
Phenanthrene
Phenol

Polychlorinated Biphenyls (PCBs) by Method 8080[3]
Arochlor 1016
Arochlor 1221
Arochlor 1232
Arochlor 1242
Arochlor 1248
Arochlor 1254
Arochlor 1260

Metals by Methods 7060, 6010[2]
Barium
Arsenic

NOTES

1 Volatile aromatic compounds.

2 Analyzed annually at wells W-06A, W-43, W-47, W-21A, W-24A, W-28, W-29, and W-30.

3 Only well W-47 is analyzed for PCBs.

Table 5
Total VOCs Detected 2000
Receptor Monitoring Group
Cook Composites and Polymers, Co.

Glacial Unit

Sample ID	Units	Jan-00	Apr-00	Jul-00	Oct-00	Annual Average
RC-1	ug/L	110	NS	NS	1983.9	1047
RC-2	ug/L	33	1107	NS	2278.1	1139
RC-3	ug/L	217	NS	6092	2054.3	2788

Deep Dolomite

Sample ID	Units	Jan-00	Apr-00	Jul-00	Oct-00	Annual Average
MW-01	ug/L	0	0	0.49	0	0.12
MW-02	ug/L	NS	NS	0	NS	0
MW-03	ug/L	0.41	NS	0	0	0.14
MW-04	ug/L	0	0	0	0	0

POTW

Sample ID	Units	Jan-00	Apr-00	Jul-00	Oct-00	Annual Average
POTW-I	ug/L	47	293	163	88	148
POTW-E	ug/L	0	1.30	1.29	0.42	0.75
POTW-S	ug/L	1007	199	12	17	309

ND = Not Detected
NS = Not Sampled

Table 6
Total VOCs Detected 2000
Perimeter Monitoring Group
Cook Composites and Polymers, Co.

Glacial Unit

Sample ID	Units	Apr-00	Oct-00	Annual Average
W-01A	ug/L	0	0	0
W-03B	ug/L	0	0.50	0.25
W-04A	ug/L	NS	0.89	0.89
W-08R	ug/L	0	NS	0
W-20	ug/L	0	0.95	0.48
W-27	ug/L	115	119	117

Shallow Dolomite

Sample ID	Units	Apr-00	Oct-00	Annual Average
PW-08	ug/L	0	0.48	0.24
W-03A	ug/L	0	0.78	0.39
W-07	ug/L	0	0	0
W-22	ug/L	1.40	0.63	1.02
W-23	ug/L	13	8	11
W-25	ug/L	NS	NS	

NS = Not Sampled
ND = Not Detected

Notes:
1. PW-08 is a deep dolomite well.
2. W-25 was abandoned in 1997.

Table 7
Total VOCs Detected 2000
Remediation Progress Monitoring Group
Cook Composites and Polymers, Co.

Glacial Unit

Sample ID	Units	Jul-00
W-06A	ug/L	151,199
W-19A	ug/L	1
W-37	ug/L	NS
W-41	ug/L	740
W-42	ug/L	17,180
W-43	ug/L	24,219
W-47	ug/L	59,880

Shallow Dolomite

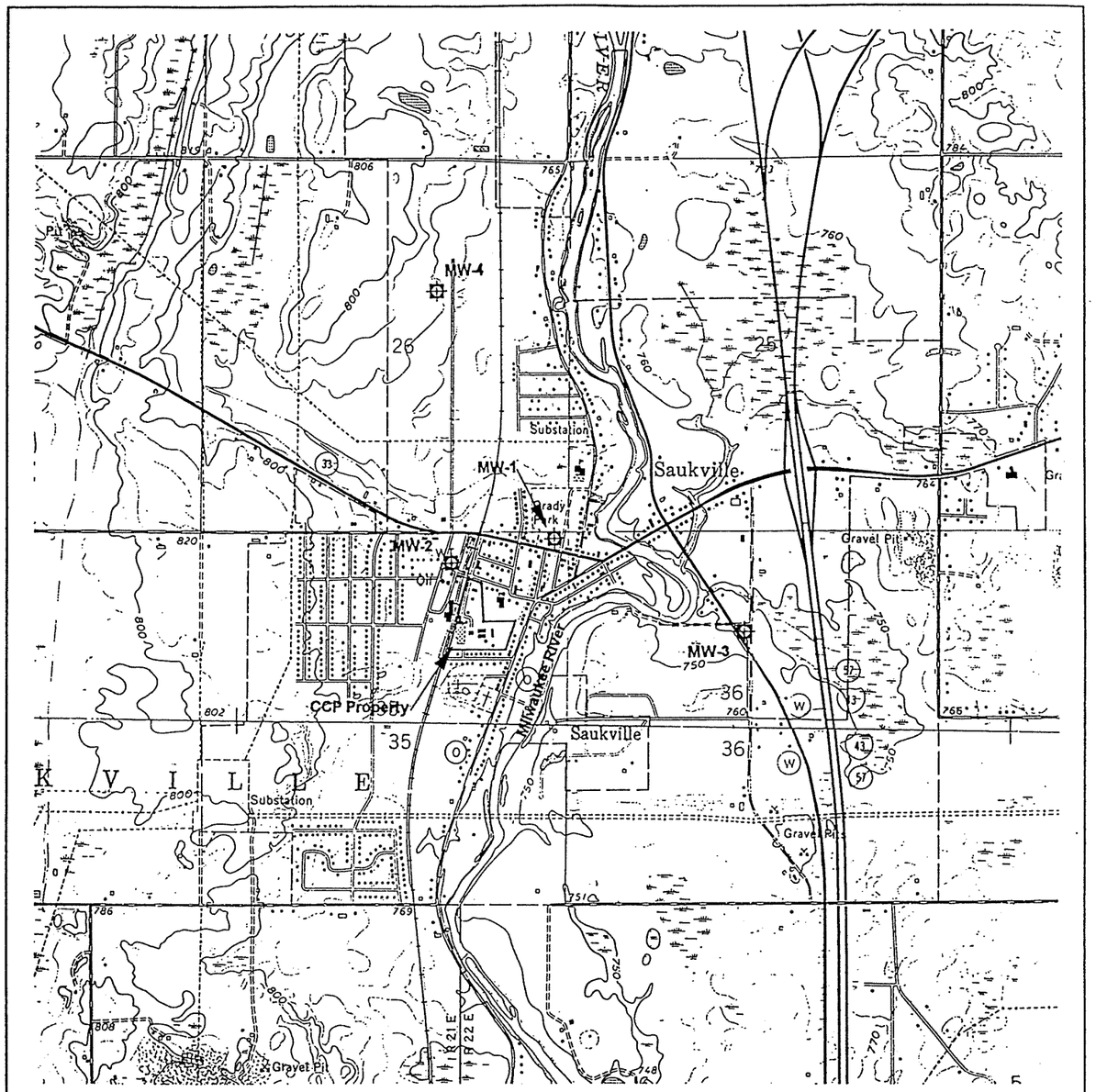
Sample ID	Units	Jul-00
W-21A	ug/L	17,876
W-24A	ug/L	1,116
W-28	ug/L	963
W-29	ug/L	NS
W-30	ug/L	83
W-38	ug/L	4,155

ND = Not Detected
NS = Not Sampled
Notes:
1. W-30 is a deep dolomite well.
2. W-37 was abandoned in 1997.

TABLE 8
SUMMARY OF APPENDIX IX PARAMETERS
COOK COMPOSITES AND POLYMERS CO.

PARAMETERS (ug/L)	DATE	NR 140		WELL							
		PAL	ES	W-06A	W-21A	W-24A	W-28	W-29	W-30	W-43	W-47
SVOCs											
1,4-Dioxane	Oct-94	--	--	710E	1200D	210	530D	ND	20	ND	380D
	Jan-95	--	--	620	960	460	610	ND	24	ND	2000E
	Jul-95	--	--	350	1000	260	660	120	19Q	ND	710
	Jul-96	--	--	870Q	1100Q	250D	900D	170	444	ND	4700
	Jul-97	--	--	ND	ND	560	1500	ND	ND	ND	ND
	Jul-98	--	--	230D	830D	670D	NS	20D	35	<3600	290
	Jul-99	--	--	210D	420	230D	480D	NS	29	<35	230
	Jul-00	--	--	470	950	640	560	NS	<36	<720	<36
2,4-Dimethylphenol	Oct-94	--	--	120	10	ND	ND	ND	ND	ND	71
	Jan-95	--	--	210	36Q	ND	ND	ND	ND	ND	210
	Jul-95	--	--	100Q	18Q	ND	ND	5Q	ND	ND	340
	Jul-96	--	--	170Q	90Q	ND	1Q	26	ND	62	230Q
	Jul-97	--	--	210	55	ND	ND	54	ND	93Q	790
	Jul-98	--	--	180D	69	69	NS	4.8	<1.0	<1000	830
	Jul-99	--	--	170D	78	<0.67	<0.67	NS	<0.67	120	1000
	Jul-00	--	--	240D	69	<1.2	<1.2	NS	<1.2	190	970
2-Methylphenol	Oct-94	--	--	32	5Q	ND	ND	ND	ND	ND	14
	Jan-95	--	--	51Q	ND	ND	ND	ND	ND	ND	27Q
	Jul-95	--	--	22Q	ND	ND	ND	ND	ND	ND	45Q
	Jul-97	--	--	29J	ND	ND	ND	ND	ND	ND	190#
	Jul-98	--	--	42	16	14	NS	<1.1	<0.97	<980	120
	Jul-99	--	--	26	<6.9	<1.4	<1.4	NS	<1.4	<14	140
	Jul-00	--	--	45	<8.5	<0.85	<0.85	NS	<0.85	<8.5	190
3-Methylphenol	Oct-94	--	--	170	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	Oct-94	--	--	112	10	ND	ND	ND	ND	ND	51
	Jan-95	--	--	180	ND	ND	ND	ND	ND	ND	130
	Jul-95	--	--	89Q	ND	ND	ND	ND	ND	ND	120
	Jul-97	--	--	91#	1.3J#	ND	ND	3.8J#	ND	ND	200
	Jul-98	--	--	120	12	9.9	NS	<1.0	<0.91	<920	190
	Jul-99	--	--	87	6.8	<1.1	<1.1	NS	<1.1	<11	260
	Jul-00	--	--	120	<9.1	<0.91	<0.91	NS	<0.91	<9.1	340
Acetophenone	Oct-94	--	--	56	ND	ND	ND	ND	ND	ND	ND
	Jan-95	--	--	78Q	ND	ND	ND	ND	ND	9600	ND
	Apr-95	--	--	ND	ND	ND	ND	ND	ND	23	ND
	Jul-95	--	--	49Q	ND	ND	ND	2Q	ND	280	120Q
	Jul-96	--	--	130QB	ND	ND	ND	ND	ND	ND	250QB
	Jul-97	--	--	ND	ND	ND	ND	ND	ND	ND	180
	Jul-98	--	--	48	10	11	NS	<0.93	<0.85	<850	240
	Jul-99	--	--	30	<4.1	<0.82	<0.82	NS	<0.82	680	200
	Jul-00	--	--	52	<3.5	<0.35	<0.35	NS	<0.35	<3.5	180
Naphthalene	Oct-94	8	40	10	ND	ND	ND	ND	ND	ND	34
	Jan-95	8	40	15Q	ND	ND	ND	ND	ND	1200Q	17Q
	Jul-95	8	40	ND	27Q	ND	ND	2Q	ND	43Q	30Q
	Jul-96	8	40	31	28Q	ND	ND	0.4Q	ND	75Q	90Q
	Jul-97	8	40	17J	4.1J	ND	ND	ND	ND	200	18J
	Jul-98	8	40	15	25	24	NS	<2.3	<2.1	<2100	110
	Jul-99	8	40	13	64	<0.41	<0.41	NS	<0.41	130	27
	Jul-00	8	40	14	28	<0.47	<0.47	NS	<0.47	85	34
Phenol	Oct-94	1200	6000	70	ND	ND	ND	ND	ND	ND	70
	Jan-95	1200	6000	110	ND	ND	ND	ND	ND	ND	190
	Jul-95	1200	6000	61Q	ND	ND	ND	ND	ND	30Q	110
	Jul-96	1200	6000	ND	ND	ND	ND	31	ND	ND	180Q
	Jul-97	1200	6000	57	44	ND	ND	52	ND	ND	130
	Jul-98	1200	6000	61	5.1	6.6	NS	7.2	<0.49	<500	48
	Jul-99	1200	6000	54	<4.0	<0.81	<0.81	NS	<0.81	<8.1	68
	Jul-00	1200	6000	66	<3.7	<0.37	<0.37	NS	<0.37	<3.7	66
1,2-Dichlorobenzene	Oct-94	60	600	ND	8Q	ND	ND	ND	ND	ND	ND
	Jul-97	60	600	ND	1.2J	ND	ND	ND	ND	ND	ND
	Jul-98	60	600	<72	<18	<18	NS	<0.36	<0.36	<36	<36
	Jul-99	60	600	NA	NA	NA	NA	NS	NA	NA	NA
	Jul-00	60	600	1.1Q	12Q	<0.53	<0.53	NS	<0.53	<5.3	<5.3
Butylbenzene	Oct-94	--	--	ND	ND	ND	ND	2Q	ND	ND	ND
2-Methylnaphthalene	Oct-94	--	--	ND	ND	ND	ND	ND	ND	ND	12
	Jan-95	--	--	ND	ND	ND	ND	ND	ND	4500	ND
	Apr-95	--	--	NA	NA	NA	NA	NA	NA	6Q	NA
	Jul-95	--	--	ND	ND	ND	ND	ND	ND	120	ND
	Jul-96	--	--	ND	ND	ND	ND	ND	ND	200Q	ND
	Jul-97	--	--	ND	ND	ND	ND	ND	ND	750	ND
	Jul-98	--	--	<1.8	<1.9	<2.0	NS	<2.0	<1.9	4200	35Q
	Jul-99	--	--	<0.50	<2.5	<0.50	<0.50	NS	<0.50	310	<5.0
	Jul-00	--	--	0.70	<3.2	<0.32	<0.32	NS	<0.32	190	7.6Q
Acenaphthene	Jan-95	--	--	ND	ND	ND	ND	ND	ND	280Q	ND
Dibenzofuran	Jan-95	--	--	ND	ND	ND	ND	ND	ND	370Q	ND
Fluorene	Jan-95	80	400	ND	ND	ND	ND	ND	ND	590Q	ND
N-Nitrosodiphenylamine	Jan-95	--	--	ND	ND	ND	ND	ND	ND	1100Q	ND
Phenanthrene	Oct-94	--	--	ND	ND	ND	ND	ND	ND	ND	ND
	Jan-95	--	--	ND	ND	ND	ND	ND	ND	1200Q	ND
	Apr-95	--	--	NA	NA	NA	NA	NA	NA	4Q	NA
	Jul-95	--	--	ND	ND	ND	ND	ND	ND	33Q	ND
	Jul-96	--	--	ND	ND	ND	ND	ND	ND	48Q	ND
	Jul-97	--	--	ND	ND	ND	ND	ND	ND	210	ND
	Jul-98	--	--	1.6Q	<0.71	<0.77	NS	<0.78	<0.71	1300	8.9Q
	Jul-99	--	--	<0.39	<1.9	<0.39	<0.39	NS	<0.39	89	<3.9
	Jul-00	--	--	0.64Q	<3.0	<0.30	<0.30	NS	<0.30	65	<3.0
Bis(2-ethylhexyl)phthalate	Oct-94	0.6	6	ND	ND	ND	ND	ND	ND	ND	25
	Jan-95	0.6	6	ND	ND	ND	ND	ND	ND	ND	54
	Jul-96	0.6	6	ND	ND	ND	ND	3Q	ND	ND	ND
	Jul-97	0.6	6	ND	ND	1.3J	ND	ND	ND	44J	ND
	Jul-98	0.6	6	2.8Q	<1.2	5.1	NS	<1.4	7.0	74000	84
	Jul-99	0.6	6	<2.1	<10	26	<2.1	NS	<2.1	490	<21
	Jul-00	0.6	6	<1.9	37Q	2.9Q	3.3Q	NS	<1.9	16	910
PCBs											
Arochlor-1242	Oct-94	0.003	0.03	ND	ND	ND	ND	ND	ND	ND	25
	Jul-96	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	38
	Jul-97	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	ND
	Jul-98	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	ND
	Jul-99	0.003	0.03	NA	NA	NA	NA	NS	NA	NA	<0.33
	Jul-00	0.003	0.03	NA	NA	NA	NA	NS	NA	NA	<0.26
Arochlor-1248	Jan-95	0.003	0.03	ND	ND	ND	ND	ND	ND	ND	27
	Jul-95	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	7
	Jul-97	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	ND
	Jul-98	0.003	0.03	NA	NA	NA	NA	NA	NA	NA	ND
	Jul-99	0.003	0.03	NA	NA	NA	NA	NS	NA	NA	<0.33
	Jul-00	0.003	0.03	NA	NA	NA	NA	NS	NA	NA	<0.26
Metals											
Arsenic	Oct-94	5	50	47	28	3	5.4	5.4	ND	ND	7.6
	Jan-95	5	50	28	30	ND	ND	16	ND	ND	ND
	Jul-95	5	50	45	29	ND	ND	ND	ND	25	4.8
	Jul-96	5	50	29	20	ND	ND	4.4	ND	30	8
	Jul-97	5	50	38	16	ND	2.5	2.7	3.2	11	6.2
	Jul-98	5	50	43	26	7.6	NS	4.5	2.3	27	6.7
	Jul-99	5	50	46	150	86	140	NS	84	1100	110
	Jul-00	5	50	25	20	2.5Q	<1.1	NS	2.4Q	78	15
Barium	Oct-94	400	2000	66	130	85	130	170	76	ND	150
	Jan-95	400	2000	68	130	74	ND	140	70	490	260
	Jul-95	400	2000	ND	140	83	160	160	73	120	130
	Jul-96	400	2000	ND	170	88	160	200	91	150	110
	Jul-97	400	2000	55	230	73	150	230	87	200	61
	Jul-98	400	2000	53	180	160	NS	320	82	450	79
	Jul-99	400	2000	38	23	2.9	<2.4	NS	<2.4	140	6
	Jul-00	400	2000	50	180	86	130	NS	82	870	96
Zinc	Oct-94	2500	5000	ND	ND	ND	270	ND	ND	ND	ND

NS = Not Sampled
NA = Not Analyzed
ND = Not Detected
PAL Exceedance
ES Exceedance



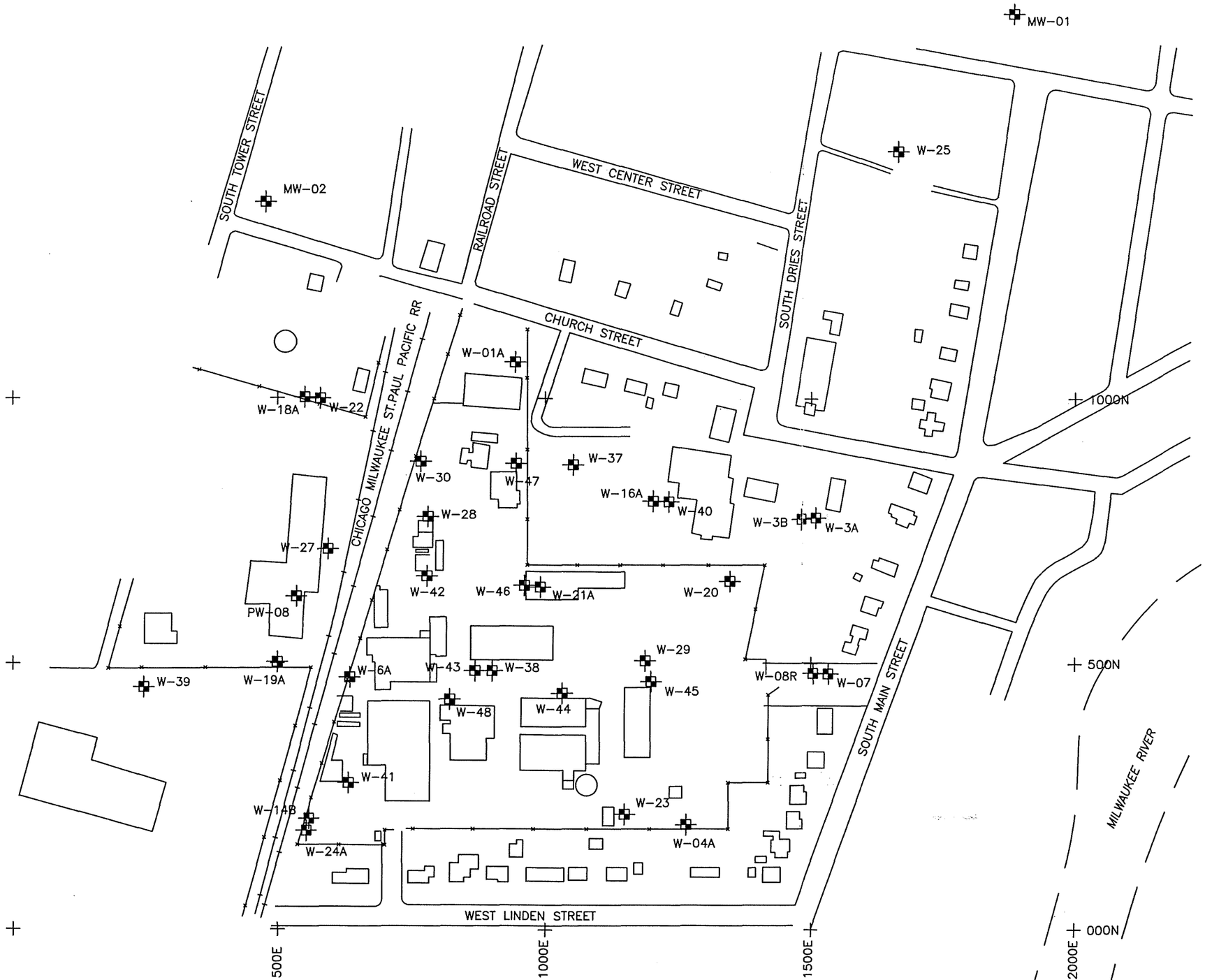
Source : Port Washington West and Cedarburg, Wisconsin 7.5 minute topographic quadrangles.

FIGURE 1

Site Location Map
Cook Composites and Polymers Co.
Saukville, Wisconsin

Woodward-Clyde

DRAWN BY :	CHECKED BY :	APPROVED BY :	DATE :	PROJECT NO. :
RAC				



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-3A — MONITORING WELL LOCATION AND NUMBER

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

FILE NAME: FIG-2.DWG
SCALE: 1" = 200'
OPER. MAS
DATE 10-15-97
PROJ. / 11035-387
TASK /
LOC.
PROJ.
SEND TO
PHONE

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	10-15-97

MONITORING WELL LOCATION MAP

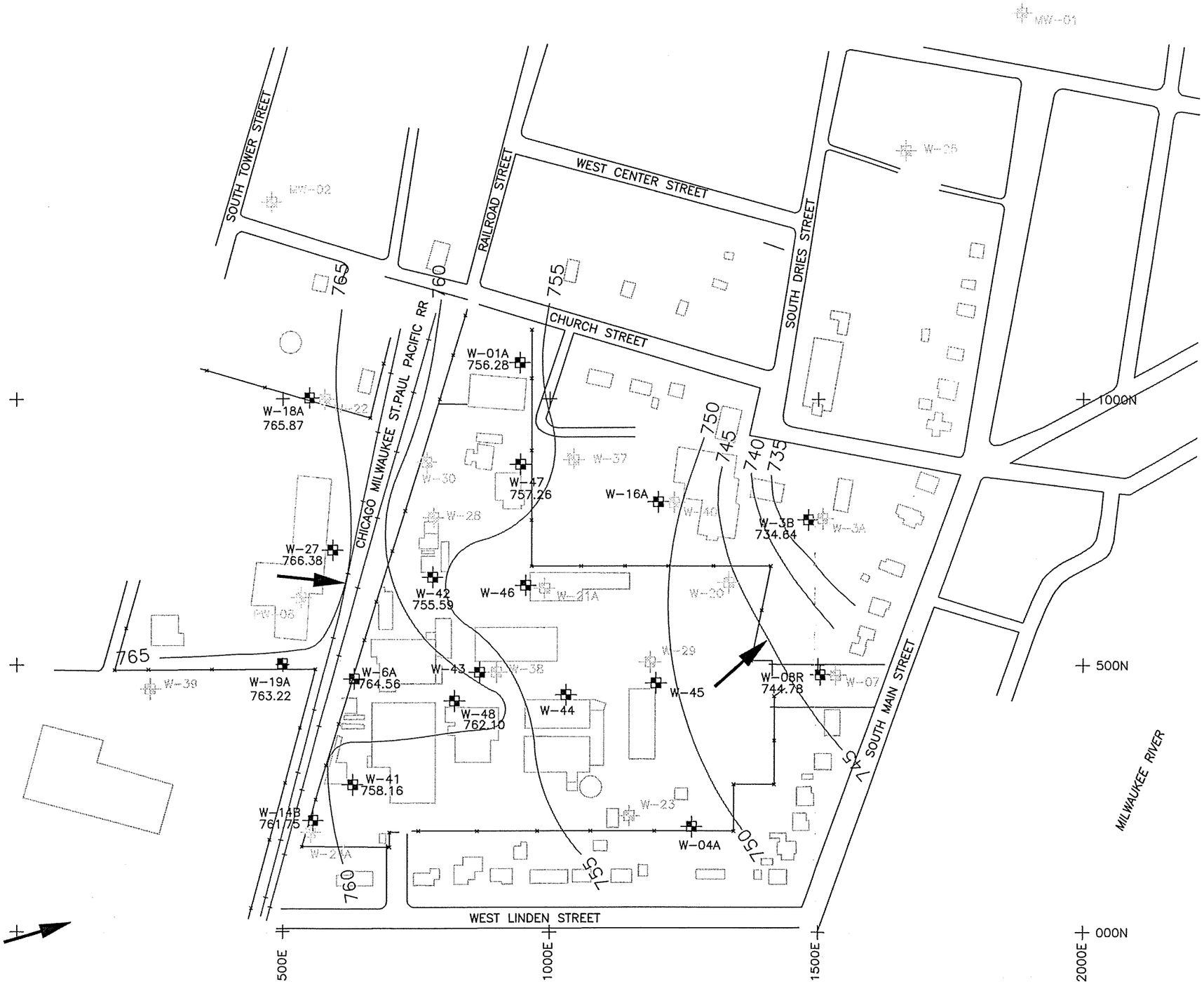
COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION

PROJECT 11035-387

FIGURE 2

SHEET 2 OF 12



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- 740 — WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

FILE NAME: FIG-3.DWG	OPER. MAS	PROJ. 11035-387	LOC.	SEND TO
SCALE: 1" = 200'	DATE 02-24-00	TASK	PROJ.	PHONE

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	02-24-00

WATER TABLE MAP
GLACIAL DRIFT – WINTER 2000

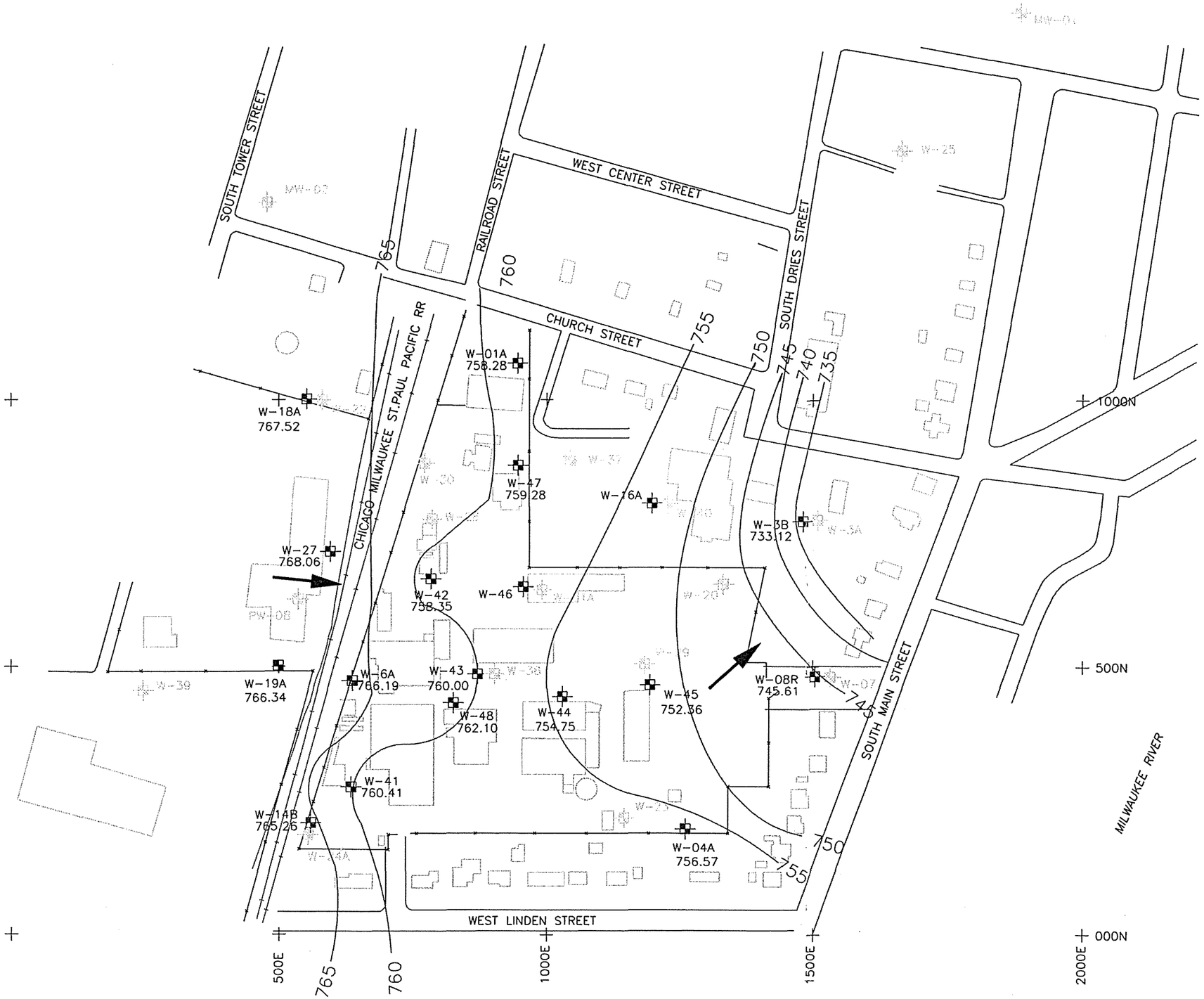
COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION

PROJECT 11035-387

FIGURE 3

SHEET 3 OF 12



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- 740 — WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

FILE NAME: FIG-4.DWG	OPER. MAS	PROJ. # 11035-387	LOC.	SEND TO
SCALE: 1" = 200'	DATE 04-19-00	TASK #	PROJ.	PHONE

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	04-19-00

WATER TABLE MAP
GLACIAL DRIFT – SPRING 2000

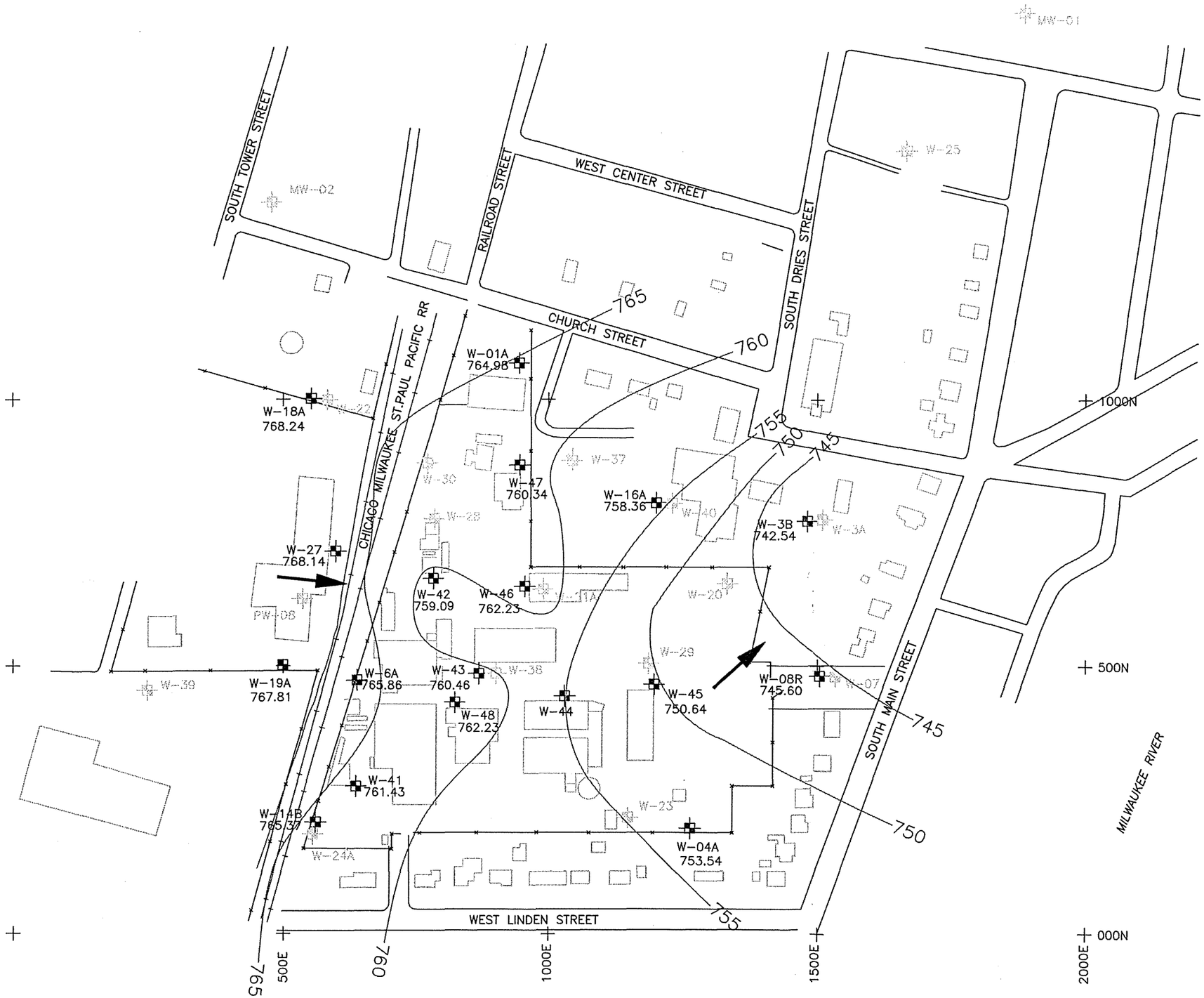
COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION

PROJECT 11035-387

FIGURE 4

SHEET 4 OF 12



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- 740 — WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

FILE NAME: FIG-5.DWG | OPER. MAS | PROJ. # 11035-387 | LOC. | SEND TO
SCALE: 1" = 200' | DATE 07-06-00 | TASK # | PROJ. | PHONE

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

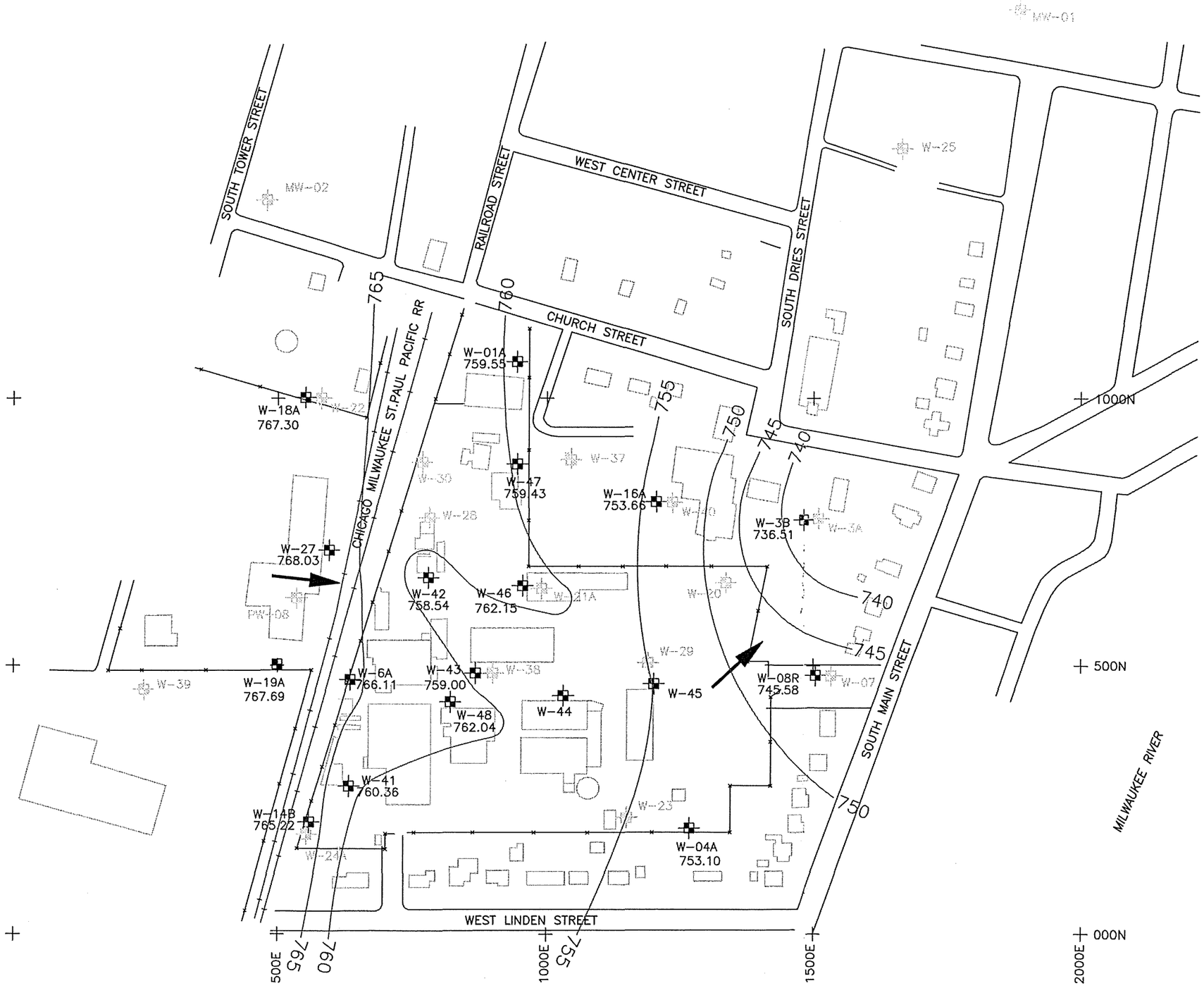
WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	07-06-00

WATER TABLE MAP
GLACIAL DRIFT - SUMMER 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION
PROJECT 11035-387
FIGURE 5
SHEET 5 OF 12



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- —740— WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	JAH
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	12-07-00

WATER TABLE MAP
GLACIAL DRIFT – FALL 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

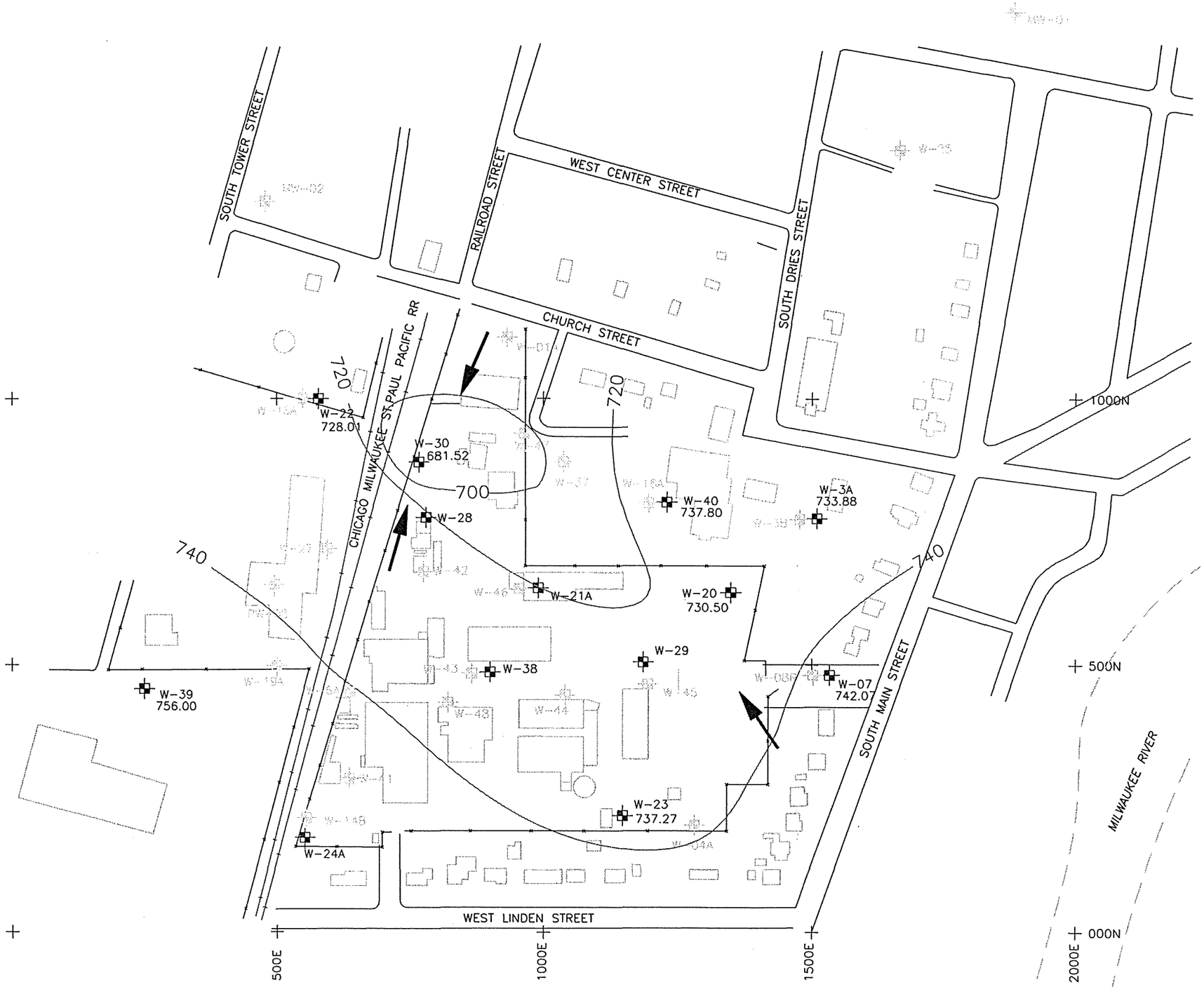
REVISION

PROJECT 11035-387

FIGURE 6

SHEET 6 OF 12

FILE NAME: FIG-6.DWG	SEND TO
SCALE: 1" = 200'	PHONE
OPER. JAH	LOC.
DATE 12-07-00	PROJ.
PROJ. # 11035-387	
TASK	



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- —740— WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

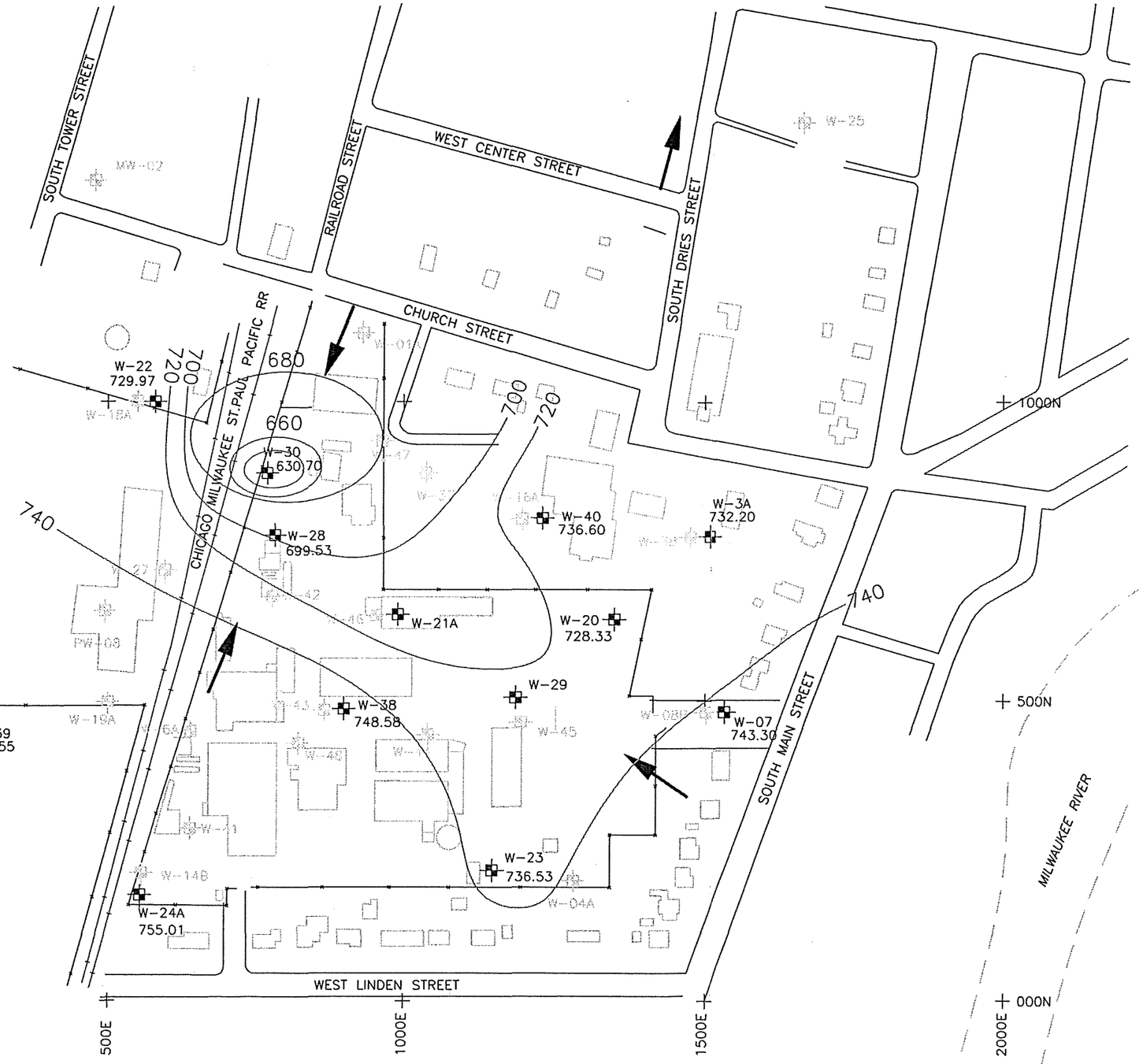
DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	02-24-00

POTENTIOMETRIC SURFACE MAP
SHALLOW DOLOMITE - WINTER 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION	
PROJECT	11035-387
FIGURE	7
SHEET	7 OF 12

FILE NAME: FIG-7.DWG	SEND TO
SCALE: 1" = 200'	PHONE
OPER. MAS	LOC.
DATE 02-24-00	PROJ.
PROJ. # 11035-387	
TASK #	



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- 740 — WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

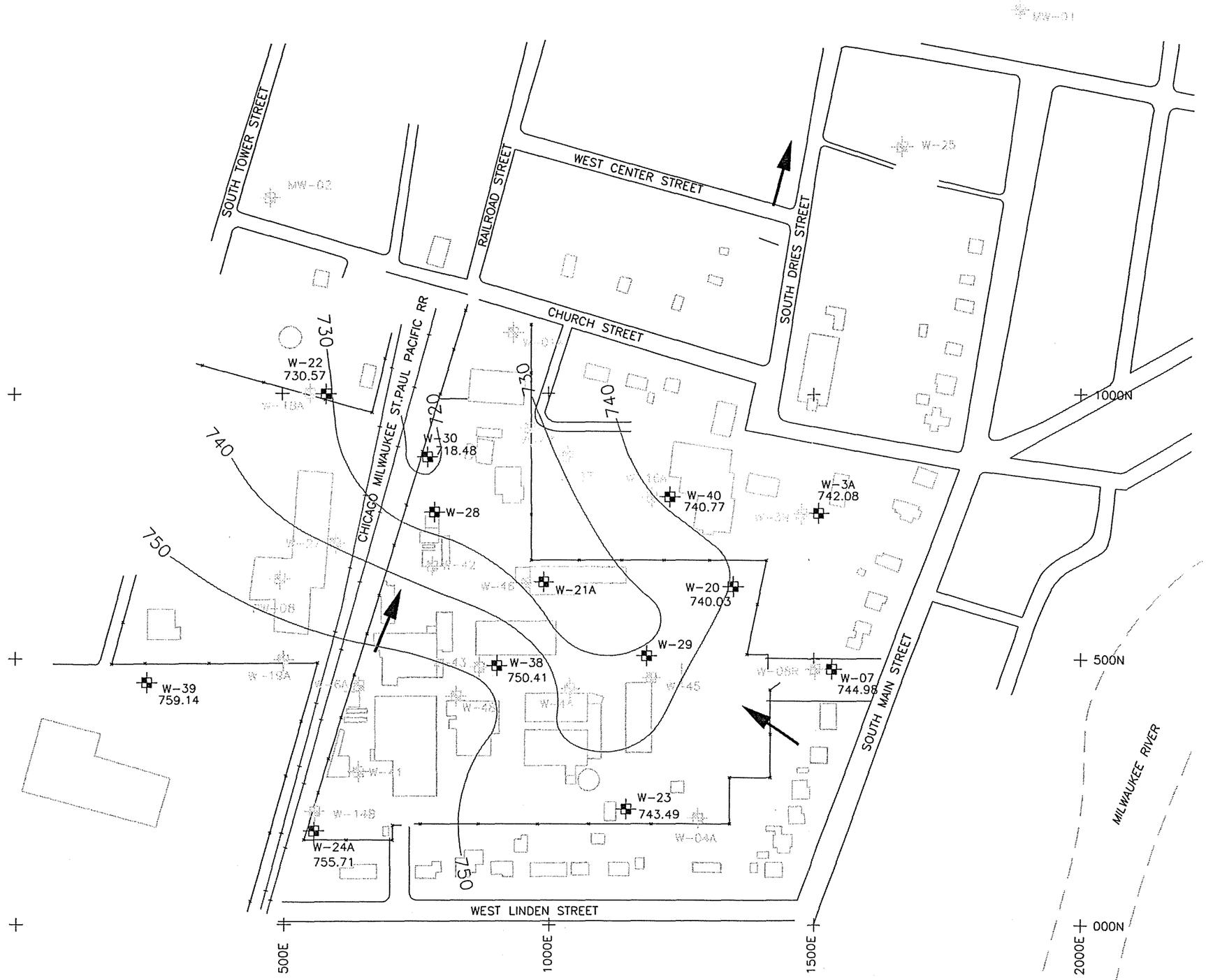
DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	04-19-00

POTENTIOMETRIC SURFACE MAP
SHALLOW DOLOMITE – SPRING 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION	
PROJECT	11035-387
FIGURE	8
SHEET	8 OF 12

FILE NAME: FIG-8.DWG	SEND TO
SCALE: 1" = 200'	PHONE
OPER. MAS	LOC.
DATE 04-19-00	PROJ.
PROJ. # 11035-387	TASK #



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- 740 — WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

FILE NAME: FIG-9.DWG	LOC.
SCALE: 1" = 200'	PROJ.
OPER. MAS	PROJ. # 11035-387
DATE 02-24-00	TASK #
	SEND TO
	PHONE

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

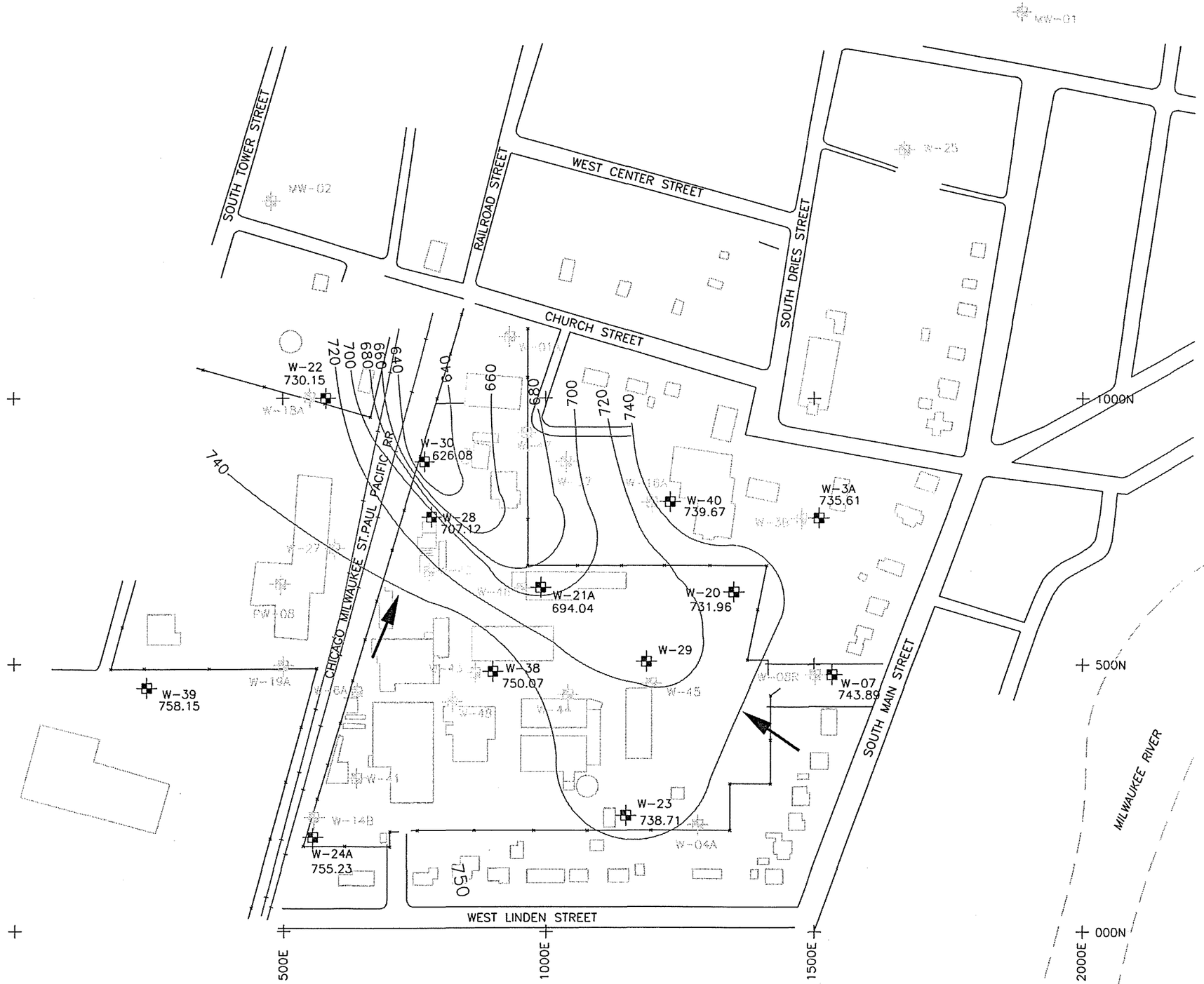
WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	07-06-00

POTENTIOMETRIC SURFACE MAP
SHALLOW DOLOMITE – SUMMER 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION	
PROJECT	11035-387
FIGURE	9
SHEET	9 OF 12



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- —740— WATER TABLE CONTOUR
- GROUNDWATER DIRECTIONAL FLOW ARROW

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	JAH
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	12-07-00

POTENTIOMETRIC SURFACE MAP
SHALLOW DOLOMITE – FALL 2000

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

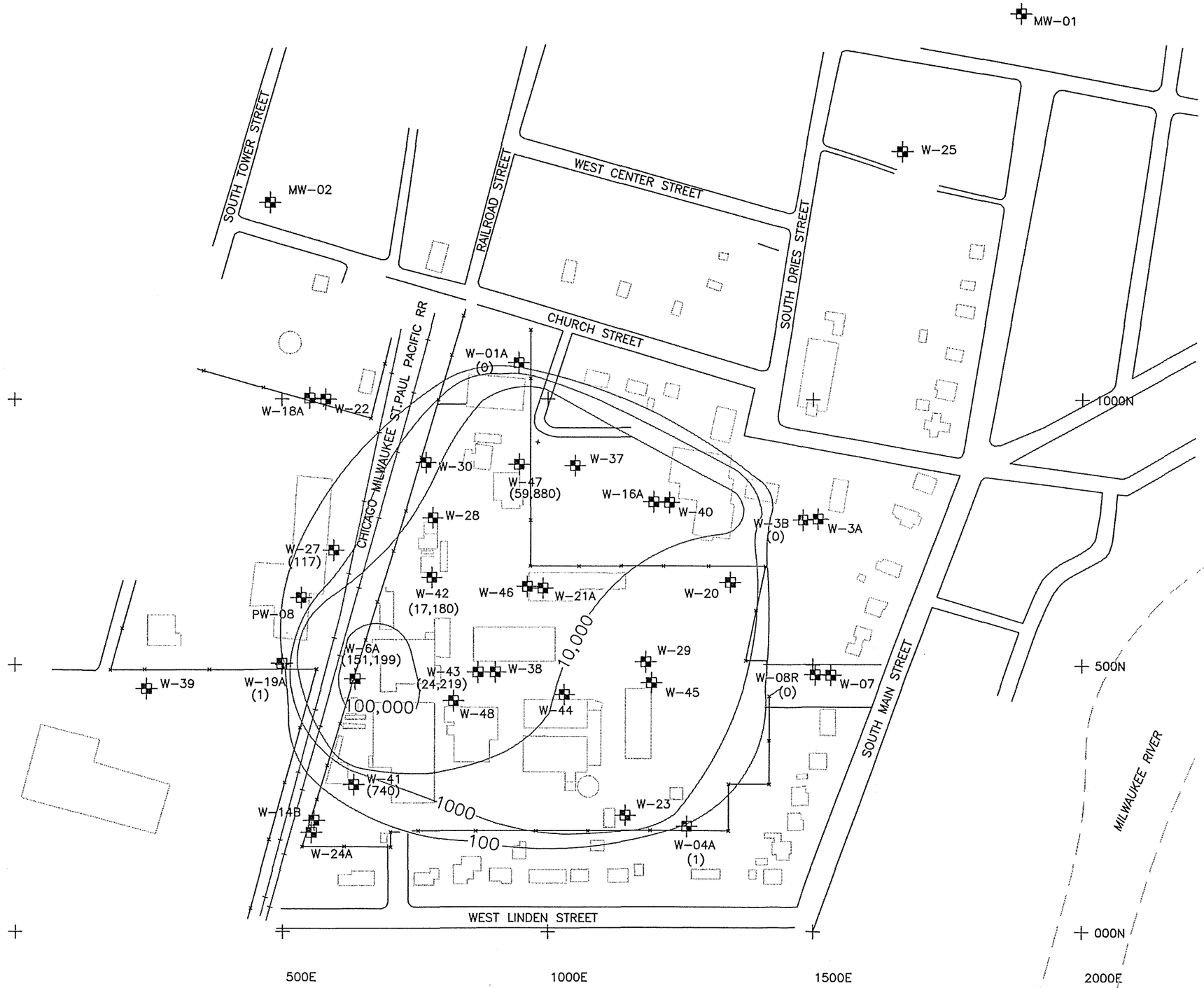
REVISION

PROJECT 11035-387

FIGURE 10

SHEET 10 OF 12

FILE NAME: FIG-10.DWG	SEND TO
SCALE: 1" = 200'	PHONE
OPER. JAH	LOC.
DATE 12-07-00	PROJ.
PROJ. # 11035-387	
TASK #	



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- —100— TOTAL VOC ISOCONCENTRATION (ug/L)
- (0) AVERAGE ANNUAL TOTAL VOC CONCENTRATIONS (ug/L)

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 1/2 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	MAS
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	01-05-00

COMPOSITE 2000 – TOTAL VOC CONCENTRATIONS
GLACIAL DRIFT WELLS

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

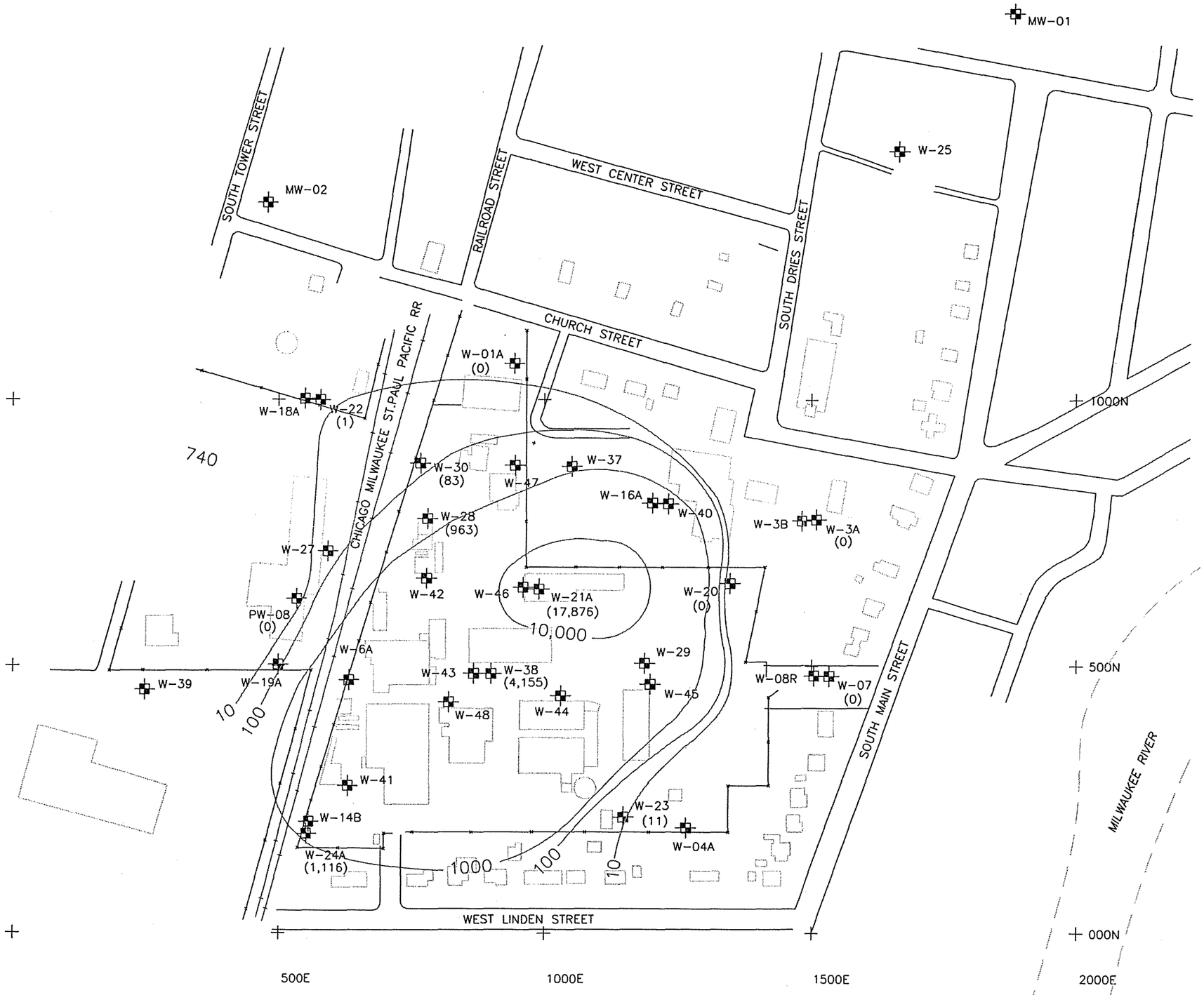
REVISION

PROJECT 11035-387

FIGURE 11

SHEET 11 OF 12

FILE NAME: 3503-02.DWG	SEND TO
SCALE: 1" = 200'	PHONE
OPER. MAS	LOC.
DATE 10-15-97	PROJ.
PROJ. # 6E09062A	
TASK #	



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- WATERLINE
- W-18A — MONITORING WELL LOCATION AND NUMBER
- —100— TOTAL VOC ISOCONCENTRATION (ug/L)
- (0) AVERAGE ANNUAL TOTAL VOC CONCENTRATIONS (ug/L)

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC..
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.

N

SCALE : 1 INCH = 200 FEET

0 200' 400'

REV	DESCRIPTION OF REVISION	BY	DATE

URS Corporation
10200 Innovation Drive, Suite 500
Milwaukee, Wisconsin 53226

WARNING
0 ½ 1
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

DESIGNED	RAC
DRAWN	TJF
CHECKED	
PEER REVIEWED	
PROJECT MANAGER	RAC
DATE	01-05-01

COMPOSITE 2000 – TOTAL VOC CONCENTRATIONS
SHALLOW DOLOMITE WELLS

COOK COMPOSITES AND POLYMERS
GROUNDWATER MONITORING PROGRAM
SAUKVILLE, WISCONSIN

REVISION

PROJECT 11035-387

FIGURE 12

SHEET 12 OF 12

FILE NAME: Fig-12.DWG | SCALE: 1" = 200' | OPER. TJF | DATE 12-05-01 | PROJ. # 11035-387 | TASK # | LOC. | PROJ. | SEND TO | PHONE

TABLE 1
MUNICIPAL WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 5-Jan-00
ENDING DATE: 5-Jan-00

(1) PAL = NR140 Preventative Action Limit
(2) ES = NR140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	MW-1-00-1 1/5/2000	MW-2-00-1 not sampled	MW-3-00-1 1/5/2000	MW-4-00-1 1/5/2000	DUP-1-00-1 1/5/2000 (MW-4-00-1)	TB-1-99-4
1,1,1-Trichloroethane	40	200	ug/L	<0.53	~	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	~	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	~	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	~	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	~	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4	ug/L	<0.58	~	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	~	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	~	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	~	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	~	0.41 Q	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	~	<0.46	<0.46	<0.46	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	~	<0.50	<0.50	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	~	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	~	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41
Toluene	68.6	343	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	~	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	~	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	~	<0.49	<0.49	<0.49	<0.49
Vinyl acetate			ug/L	<0.70	~	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	~	<0.17	<0.17	<0.17	<0.17
Xylene, o	124	620	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
Xylene, m, p	124	620	ug/L	<0.77		<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.0	NS	0.41	0.0	0.0	0.0
October 1999 Total VOCs			ug/L	0.0	NS	NS	0.0	0.0	8.6

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NS - Not Sampled

1/5/2001

TABLES.XLS:VILLAGE_WELLS
NOTE: DATA QUALIFIERS ARE DISCUSSED IN APPENDIX B.

TABLE 2
POTW AND RANNEY COLLECTOR RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 1/05/00
ENDING DATE: 1/05/00

Parameter	Units	POTW-I-00-1 1/5/2000		POTW-E-00-1 1/5/2000		POTW-S-00-1 1/5/2000		RC-1-00-1 1/5/2000		RC-2-00-1 1/5/2000		RC-3-00-1 1/5/2000	
1,1,1-Trichloroethane	ug/L	<0.53		<0.53		<0.53							
1,1,2,2-Tretrachloroethane	ug/L	<0.68		<0.68		<0.68							
1,1,2-Trichloroethane	ug/L	<0.47		<0.47		<0.47							
1,1-Dichloroethane	ug/L	<0.61		<0.61		<0.61							
1,1-Dichloroethene	ug/L	<0.47		<0.47		<0.47							
1,2-Dichloroethane	ug/L	<0.54		<0.54		<0.54							
1,2-Dichloropropane	ug/L	<0.34		<0.34		<0.34							
2-Butanone	ug/L	1.3	Q	<1.2		11							
2-Hexanone	ug/L	<0.61		<0.61		<0.61							
4-Methyl-2-pentanone	ug/L	<0.61		<0.61		<0.61							
Acetone	ug/L	42		<3.1		46							
Benzene	ug/L	<0.44		<0.44		<0.44		5.6		1.5		8.1	
Bromodichloromethane	ug/L	<0.41		<0.41		<0.41							
Bromoform	ug/L	<0.58		<0.58		<0.58							
Bromomethane	ug/L	<0.94		<0.94		<0.94							
Carbon disulfide	ug/L	<0.40		<0.40		<0.40							
Carbon tetrachloride	ug/L	<0.90		<0.90		<0.90							
Chlorobenzene	ug/L	<0.43		<0.43		<0.43		<0.43		<0.43		<0.43	
Chlorodibromomethane	ug/L	<0.43		<0.43		<0.43							
Chloroethane	ug/L	<0.63		<0.63		<0.63							
Chloroform	ug/L	0.42	Q	<0.41		<0.41							
Chloromethane	ug/L	<0.44		<0.44		<0.44							
cis-1,2-Dichloroethene	ug/L	0.52	Q	<0.46		<0.46							
cis-1,3-Dichloropropene	ug/L	<0.54		<0.54		<0.54							
Ethylbenzene	ug/L	<0.50		<0.50		<0.50		<0.50		<0.50		9.5	
Methylene chloride	ug/L	<0.38		<0.38		<0.38							
Styrene	ug/L	<0.37		<0.37		<0.37							
Tetrachloroethene	ug/L	<0.41		<0.41		<0.41							
Toluene	ug/L	0.98	Q	<0.40		950	D	5.1		1.7		13	
trans-1,2-Dichloroethene	ug/L	<0.64		<0.64		<0.64							
trans-1,3-Dichloropropene	ug/L	<0.26		<0.26		<0.26							
Trichloroethene	ug/L	<0.49		<0.49		<0.49							
Vinyl acetate	ug/L	<0.70		<0.70		<0.70							
Vinyl Chloride	ug/L	<0.17		<0.17		<0.17							
Xylene, o	ug/L	<0.54		<0.54		<0.54		37		12		56	
Xylene, m, p	ug/L	1.5	Q	<0.77		<0.77		62		18		130	
1,3-Dichlorobenzene	ug/L	~		~		~			<0.64		<0.64		<0.64
1,2-Dichlorobenzene	ug/L	~		~		~			<0.36		<0.36		<0.36
1,4-Dichlorobenzene	ug/L	~		~		~			<0.43		<0.43		<0.43
Total VOCs	ug/L	46.72		0		1007		110		33.2		216.6	
October 1999 Total VOCs	ug/L	104.78		4.76		28		NS		2737		NS	

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

D - Analyte value from diluted analysis.

NS - Not Sampled

TABLE 1
MUNICIPAL WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 4-Apr-00
ENDING DATE: 6-Apr-00

(1) PAL = NR140 Preventative Action Limit
(2) ES = NR140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	MW-1-00-2 4/5/2000	MW-2-99-4 not sampled	MW-3-00-2 4/5/2000	MW-4-00-2 4/5/2000	DUP-1-00-2 4/5/2000 (MW-4-00-2)	TB-1-00-2
1,1,1-Trichloroethane	40	200	ug/L	<0.53	~	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	~	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	~	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	~	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	~	<3.1	<3.1	<3.1	5.3 Q
Benzene	0.5	5	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4	ug/L	<0.58	~	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	~	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	~	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	~	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	~	<0.46	<0.46	<0.46	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	~	<0.50	<0.50	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	~	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	~	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41
Toluene	68.6	343	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	~	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	~	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	~	<0.49	<0.49	<0.49	<0.49
Vinyl acetate			ug/L	<0.70	~	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	~	<0.17	<0.17	<0.17	<0.17
Xylene, o	124	620	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54
Xylene, m, p	124	620	ug/L	<0.77		<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.0	NS	0.0	0.0	0.0	5.3
October 1999 Total VOCs			ug/L	0.0	NS	NS	0.0	0.0	8.6

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NS - Not Sampled

1/5/2001

TABLE 2
POTW AND RANNEY COLLECTOR RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 4/4/00
ENDING DATE: 4/6/00

Parameter	Units	POTW-I-00-2 4/5/2000		POTW-E-00-2 4/5/2000		POTW-S-00-2 4/5/2000		RC-1-00-2 not sampled		RC-2-00-2 4/5/2000		RC-3-00-2 not sampled	
1,1,1-Trichloroethane	ug/L	<0.53		<0.53		<0.53	W						
1,1,2,2-Tretrachloroethane	ug/L	<0.68		<0.68		<0.68	W						
1,1,2-Trichloroethane	ug/L	<0.47		<0.47		<0.47	W						
1,1-Dichloroethane	ug/L	<0.61		<0.61		<0.61	W						
1,1-Dichloroethene	ug/L	<0.47		<0.47		<0.47	W						
1,2-Dichloroethane	ug/L	<0.54		<0.54		<0.54	W						
1,2-Dichloropropane	ug/L	<0.34		<0.34		<0.34	W						
2-Butanone	ug/L	<1.2		<1.2		6.4	W						
2-Hexanone	ug/L	<0.61		<0.61		<0.61	W						
4-Methyl-2-pentanone	ug/L	<0.61		<0.61		<0.61	W						
Acetone	ug/L	280	E	<3.1		33	W						
Benzene	ug/L	<0.44		<0.44		<0.44	W			31			
Bromodichloromethane	ug/L	<0.41		<0.41		<0.41	W						
Bromoform	ug/L	<0.58		<0.58		<0.58	W						
Bromomethane	ug/L	<0.94		<0.94		<0.94	W						
Carbon disulfide	ug/L	<0.40		<0.40		<0.40	W						
Carbon tetrachloride	ug/L	<0.90		<0.90		<0.90	W						
Chlorobenzene	ug/L	<0.43		<0.43		<0.43	W			<0.43			
Chlorodibromomethane	ug/L	<0.43		<0.43		<0.43	W						
Chloroethane	ug/L	<0.63		<0.63		<0.63	W						
Chloroform	ug/L	0.49	Q	<0.41		<0.41	W						
Chloromethane	ug/L	<0.44		<0.44		<0.44	W						
cis-1,2-Dichloroethene	ug/L	0.47	Q	<0.46		<0.46	W						
cis-1,3-Dichloropropene	ug/L	<0.54		<0.54		<0.54	W						
Ethylbenzene	ug/L	<0.50		<0.50		<0.50	W			250	D		
Methylene chloride	ug/L	<0.38		<0.38		<0.38	W						
Styrene	ug/L	<0.37		<0.37		<0.37	W						
Tetrachloroethene	ug/L	6.4		1.3		<0.41	W						
Toluene	ug/L	2.6		<0.40		160	W			12			
trans-1,2-Dichloroethene	ug/L	<0.64		<0.64		<0.64	W						
trans-1,3-Dichloropropene	ug/L	<0.26		<0.26		<0.26	W						
Trichloroethene	ug/L	1.1	Q	<0.49		<0.49	W						
Vinyl acetate	ug/L	<0.70		<0.70		<0.70	W						
Vinyl Chloride	ug/L	<0.17		<0.17		<0.17	W						
Xylene, o	ug/L	0.56	Q	<0.54		<0.54	W			150			
Xylene, m, p	ug/L	1.1	Q	<0.77		<0.77	W			650	D		
1,3-Dichlorobenzene	ug/L	~		~		~				~			
1,2-Dichlorobenzene	ug/L	~		~		~				~			
1,4-Dichlorobenzene	ug/L	~		~		~				~			
Total VOCs	ug/L	292.72		1.3		199.4		NS		1093		NS	
October 1999 Total VOCs	ug/L	104.78		4.76		28		NS		2737		NS	

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

W - Sample POTW-S-00-2 was received with headspace in the VOA vial.

D - Analyte value from diluted analysis.

E - The acetone result exceeded the calibration range in sample POTW-I-00-2.

NS - Not Sampled

PROJECT NUMBER: 11035-387
BEGINNING DATE: 4/4/00
ENDING DATE: 4/6/00

TABLE 3
SUMMARY OF MONITORING WELL RESULTS

(1) PAL = NR 140 Preventative Action Limit
(2) ES = NR 140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	W-01A-00-2 4/5/2000	W-03A-00-2 4/6/2000	DUP3-00-2 4/6/2000 (W-03A-00-2)	W-03B-00-2 4/6/2000	W-04A-00-2 4/4/2000	W-07-00-2 4/5/2000
1,1,1-Trichloroethane	40	200	ug/L	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4	ug/L	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	68.6	343	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49
Vinyl acetate			ug/L	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Xylene, o	124	620	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Xylene, m, p	124	620	ug/L	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.0	0.0	0.0	0.0	0.0	0.0
October 1999 Total VOCs			ug/L	0.0	0.0	0.0	0.0	0.0	0.0

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

TABLE 3 CONTINUED
SUMMARY OF MONITORING WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 4/4/00
ENDING DATE: 4/6/00

(1) PAL = NR 140 Preventative Action Limit
(2) ES = NR 140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	W-20-00-2 4/5/2000	W-22-00-2 4/6/2000	W-23-00-2 4/5/2000	DUP-2-00-2 4/5/2000 (W-23-00-2)	W-27-00-2 4/5/2000	PW-08-00-2 4/5/2000
1,1,1-Trichloroethane	40	200	ug/L	<0.53	<0.53	<0.53	<0.53	0.8 Q	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	1.4	8.6	8.8	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4	ug/L	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	<0.40	0.44 Q	0.42 Q	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	<0.46	2.7	2.8	14	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	<0.50	<0.54	<0.54	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	68.6	343	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	<0.49	<0.49	<0.49	100	<0.49
Vinyl acetate			ug/L	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	<0.17	1.0	1.1	<0.17	<0.17
Xylene, o	124	620	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Xylene, m, p	124	620	ug/L	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.0	1.4	12.74	13.12	115	0.0
October 1999 Total VOCs			ug/L	0.0	0.0	46.20	49.30	214	1.5

Indicates concentration in exceedance of Preventative Action Limit
Indicates concentration in exceedance of Enforcement Standard

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NOTE: DATA QUALIFIERS ARE DISCUSSED IN APPENDIX B.

TABLE 1
MUNICIPAL WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 7/5/2000
ENDING DATE: 7/7/2000

(1) PAL = NR140 Preventative Action Limit
(2) ES = NR140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	MW-1-00-3 7/6/2000	MW-2-00-3 7/6/2000	MW-3-00-2 7/6/2000	MW-4-00-3 7/6/2000	DUP-1-00-3 7/6/2000 (MW-4-00-3)	TB-00-3 7/6/2000	TB-00-3 7/6/2000
1,1,1-Trichloroethane	40	200	ug/L	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.49	<0.49
1,2-Dichloropropane	0.5	5	ug/L	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4	ug/L	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	<0.38	<0.38	<0.38	<0.38	0.40 Q	0.41 Q
Styrene	10	100	ug/L	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	200	1000	ug/L	0.49 Q	<0.40	<0.40	<0.40	0.44 Q	<0.40	<0.40
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49
Vinyl acetate			ug/L	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17
Xylene, o	1000	10000	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Xylene, m, p	1000	10000	ug/L	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.49	0.0	0.0	0.0	0.44	0.40	0.41
July 1999 Total VOCs			ug/L	0.0	0.0	~	0.0	0.0		

1/5/2001

TABLES.XLS:VILLAGE_WELLS
NOTE: DATA QUALIFIERS ARE DISCUSSED IN APPENDIX B.

TABLE 2
POTW AND RANNEY COLLECTOR RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 7/5/00
ENDING DATE: 7/7/00

Parameter	Units	POTW-I-00-3 7/5/2000	POTW-E-00-3 7/5/2000	POTW-S-00-3 7/5/2000	RC-1-00-3 not sampled	RC-2-00-3 not sampled	RC-3-00-3 7/6/2000
1,1,1-Trichloroethane	ug/L	<0.53	<0.53	<0.53			
1,1,2,2-Tretrachloroethane	ug/L	<0.68	<0.68	<0.68			
1,1,2-Trichloroethane	ug/L	<0.47	<0.47	<0.47			
1,1-Dichloroethane	ug/L	<0.61	<0.61	<0.61			
1,1-Dichloroethene	ug/L	<0.47	<0.47	<0.47			
1,2-Dichloroethane	ug/L	<0.54	<0.54	<0.54			
1,2-Dichloropropane	ug/L	<0.34	<0.34	<0.34			
2-Butanone	ug/L	5.8	<1.2	2.2 Q			
2-Hexanone	ug/L	<0.61	<0.61	<0.61			
4-Methyl-2-pentanone	ug/L	<0.61	<0.61	<0.61			
Acetone	ug/L	150	<3.1	8.2 Q			
Benzene	ug/L	<0.44	<0.44	<0.44			27
Bromodichloromethane	ug/L	<0.41	0.64 Q	<0.41			
Bromoform	ug/L	<0.58	<0.58	<0.58			
Bromomethane	ug/L	<0.94	<0.94	<0.94			
Carbon disulfide	ug/L	<0.40	<0.40	<0.40			
Carbon tetrachloride	ug/L	<0.90	<0.90	<0.90			
Chlorobenzene	ug/L	<0.43	<0.43	<0.43			<2.1
Chlorodibromomethane	ug/L	<0.43	<0.43	<0.43			
Chloroethane	ug/L	<0.63	<0.63	<0.63			
Chloroform	ug/L	1.5	0.65 Q	<0.41			
Chloromethane	ug/L	<0.44	<0.44	<0.44			
cis-1,2-Dichloroethene	ug/L	0.62 Q	<0.46	<0.46			
cis-1,3-Dichloropropene	ug/L	<0.54	<0.54	<0.54			
Ethylbenzene	ug/L	<0.50	<0.50	<0.50			260
Methylene chloride	ug/L	0.74 Q	<0.38	<0.38			
Styrene	ug/L	<0.37	<0.37	<0.37			
Tetrachloroethene	ug/L	1.0 Q	<0.41	<0.41			
Toluene	ug/L	2.3	<0.40	1.1 Q			1200 D
trans-1,2-Dichloroethene	ug/L	<0.64	<0.64	<0.64			
trans-1,3-Dichloropropene	ug/L	<0.26	<0.26	<0.26			
Trichloroethene	ug/L	<0.49	<0.49	<0.49			
Vinyl acetate	ug/L	<0.70	<0.70	<0.70			
Vinyl Chloride	ug/L	<0.17	<0.17	<0.17			
Xylene, o	ug/L	<0.54	<0.54	<0.54			1300 D
Xylene, m, p	ug/L	1.2 Q	<0.77	<0.77			3300 D
1,3-Dichlorobenzene	ug/L	~	~	~			<3.2
1,2-Dichlorobenzene	ug/L	~	~	~			5.3 Q
1,4-Dichlorobenzene	ug/L	~	~	~			<2.1
Total VOCs	ug/L	163.16	1.29	11.5			6092.3
July 1999 Total VOCs	ug/L	472.05	1.19	2975.0			~

PROJECT NUMBER: 11035-387
BEGINNING DATE: 7/5/00
ENDING DATE: 7/7/00

TABLE 3
SUMMARY OF MONITORING WELL RESULTS

(1) PAL = NR 140 Preventative Action Limit
(2) ES = NR 140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	W-6A-00-3 7/6/2000	W-19A-00-3 7/5/2000	DUP2-00-3 7/5/2000 (W-19A-00-3)	W-21A-00-3 7/6/2000	W-24A-00-3 7/6/2000	W-28-00-3 7/7/1999	W-29-00-3 not sampled	W-30-00-3 7/6/2000	DUP-3-00-3 7/6/2000 (W-30-00-3)	W-38-00-3 7/5/2000	W-41-00-3 7/6/2000	W-42-00-3 7/6/2000	W-43-00-3 7/5/2000	W-47-00-3 7/6/2000	DUP4-00-3 7/6/2000 (W-47-00-3)
Barium	400	2000	ug/L	50			180	86	130		82	84				870	96	
Arsenic	5	50	ug/L	25			20	2.5 Q	<1.1		2.4 Q	2.7 Q				78	15	
Aroclor 1016	0.03	0.3	ug/L														<0.26	<0.26
Aroclor1221	0.03	0.3	ug/L														<0.26	<0.26
Aroclor 1232	0.03	0.3	ug/L														<0.26	<0.26
Aroclor 1242	0.03	0.3	ug/L														<0.26	<0.26
Aroclor 1248	0.03	0.3	ug/L														0.58 Q	1.1
Aroclor 1254	0.03	0.3	ug/L														<0.26	<0.26
Aroclor 1260	0.03	0.3	ug/L														<0.26	<0.26
1,4-Dioxane	-	-	ug/L	270 D			490	380 D	380 D		60	52				<4.5	250	
2,4-Dimethylphenol	-	-	ug/L	240 D			69	<1.2	<1.2		<1.2	<1.2				190	970	
2-Methylnaphthalene	-	-	ug/L	0.70 Q			<3.2	<0.32	<0.32		<0.32	<0.32				190	7.6 Q	
2-Methylphenol	-	-	ug/L	45			<8.5	<0.85	<0.85		<0.85	<0.85				<8.5	190	
4-Methylphenol	-	-	ug/L	120			<9.1	<0.91	<0.91		<0.91	<0.91				<9.1	340	
Acetophenone	-	-	ug/L	52			<3.5	<0.35	<0.35		<0.35	<0.35				<3.5	180	
Bis(2-ethylhexyl)phthalate	0.6	6	ug/L	<1.9			37 Q	2.9 Q	3.3 Q		<1.9	<1.9				160	910	
Naphthalene	8	40	ug/L	14			28	<0.47	<0.47		<0.47	<0.47				85	34	
Phenanthrene	-	-	ug/L	0.64 Q			<3.0	<0.30	<0.30		<0.30	<0.30				65	<3.0	
Phenol	1200	6000	ug/L	66			<3.7	<0.37	<0.37		<0.37	<0.37				<3.7	66	
1,2-Dichlorobenzene	60	600	ug/L	1.1 Q	<0.36	<0.36	12 Q	<0.53	<0.53		<0.53	<0.53	3.1	<0.36	<0.36	<5.3	<5.3	
1,3-Dichlorobenzene	125	1250	ug/L	<0.77	<0.64	0.67 Q	<7.7	<0.77	<0.77		<0.77	<0.77	<0.64	<0.64	<0.64	<7.7	<7.7	
1,4-Dichlorobenzene	15	75	ug/L	<0.66	0.45 Q	0.78 Q	<6.6	<0.66	<0.66		<0.66	<0.66	<0.43	<0.43	<0.43	<6.6	<6.6	
1,1,1,2-Tetrachloroethane	7	70	ug/L	<0.49			<0.49	<0.49	<0.49		<0.49					<9.8	<0.49	
1,1,1-Trichloroethane	40	200	ug/L	<0.53			<0.53	<0.53	<0.53		<0.53					<11	<0.53	
1,1,2,2-Tetrachloroethane	0.02	0.2	ug/L	<0.68			<0.68	<0.68	<0.68		<0.68					<14	<0.68	
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47			<0.47	<0.47	<0.47		<0.47					<9.4	<0.47	
1,1-Dichloroethane	85	850	ug/L	0.73 Q			<0.61	<0.61	<0.61		<0.61					<12	0.62 Q	
1,1-Dichloroethene	0.7	7	ug/L	0.77 Q			<0.47	<0.47	<0.47		<0.47					<9.4	<0.47	
1,2,3-Trichloropropane	12	60	ug/L	<0.71			<0.71	<0.71	<0.71		<0.71					<14	<0.71	
1,2-Dibromo-3-chloropropane	0.02	0.2	ug/L	<1.2			<1.2	<1.2	<1.2		<1.2					<25	<1.2	
1,2-Dibromoethane	0.005	0.05	ug/L	<0.49			<0.49	<0.49	<0.49		<0.49					<9.8	<0.49	
1,2-Dichloroethane	0.5	5	ug/L	<0.54			3.4	<0.54	<0.54		<0.54					<11	0.65 Q	
1,2-Dichloropropane	0.5	5	ug/L	1.0 Q			0.64 Q	<0.34	<0.34		<0.34					<6.8	<0.34	
1,4-Dioxane	-	-	ug/L	470			950	640	560		<36					<720	<36	
2-Butanone	90	460	ug/L	57			5.3	<1.2	<1.2		<1.2					89	52	
2-Hexanone	-	-	ug/L	7.0			<0.61	<0.61	<0.61		<0.61					<12	<0.61	
4-Methyl-2-pentanone	50	500	ug/L	36			<0.61	<0.61	<0.61		<0.61					<12	72	
Acetone	200	1000	ug/L	2100 QDB			<3.1	<3.1	16		<3.1					1800	1200 DB	
Acetonitrile	-	-	ug/L	<0.51			<0.51	<0.51	<0.51		<0.51					<10	<0.51	
Acrolein	-	-	ug/L	<5.7			<5.7	<5.7	<5.7		<5.7					<110	<5.7	
Acrylonitrile	-	-	ug/L	3.0			<0.65	<0.65	<0.65		<0.65					<13	<0.65	
Allyl Chloride	-	-	ug/L	<0.48			<0.48	<0.48	<0.48		<0.48					<9.6	<0.48	
Benzene	0.5	5	ug/L	340 QD	<0.44	<0.44	1700 D	7.9	0.76 Q		7.9		1900 D	5.1	550 D	6600 D	120	
Bromodichloromethane	0.06	0.6	ug/L	<0.41			<0.41	<0.41	<0.41		<0.41					<8.2	<0.41	
Bromoform	0.44	4	ug/L	<0.58			<0.58	<0.58	<0.58		<0.58					<12	<0.58	
Bromomethane	1	10	ug/L	<0.94			<0.94	<0.94	<0.94		<0.94					<19	<0.94	
Carbon disulfide	200	1000	ug/L	<0.40			<0.40	<0.40	2.4		<0.40					<8.0	<0.40	
Carbon tetrachloride	0.5	5	ug/L	<0.90			<0.90	<0.90	<0.90		<0.90					<18	<0.90	
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43		<0.43		<0.43	<0.43	<0.43	<8.6	<0.43	
Chlorodibromomethane	6	60	ug/L	<0.43			<0.43	<0.43	<0.43		<0.43					<8.6	<0.43	
Chloroethane	80	400	ug/L	<0.63			0.66 Q	<0.63	<0.63		<0.63					<13	<0.63	
Chloroform	0.6	6	ug/L	<0.41			<0.41	<0.41	<0.41		<0.41					<8.2	<0.41	
Chloromethane	0.3	3	ug/L	<0.44			<0.44	<0.44	<0.44		<0.44					<8.8	<0.44	
Chloroprene	-	-	ug/L	<1.0			<1.0	<1.0	<1.0		<1.0					<20	<1.0	
cis-1,2-Dichloroethene	7	70	ug/L	360 QD			<0.46	9.3	<0.46		<0.46					<9.2	78	
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54			<0.54	<0.54	<0.54		<0.54					<11	<0.54	
Dibromomethane	-	-	ug/L	<0.60			<0.60	<0.60	<0.60		<0.60					<12	<0.60	
Dichlorodifluoromethane	200	1000	ug/L	<0.61			<0.61	<0.61	<0.61		<0.61					<12	<0.61	
Ethyl methacrylate	-	-	ug/L	<0.42			<0.42	<0.42	<0.42		<0.42					<8.4	<0.42	
Ethylbenzene	140	700	ug/L	17000 D	<0.50	<0.50	1100 D	10	<0.50		<0.50		32	4.1	3400 D	5400 D	2700 D	
Fluorotrichloromethane	698	3490	ug/L	<0.47			<0.47	<0.47	<0.47		<0.47					<9.4	<0.47	
Iodomethane	-	-	ug/L	<0.53			<0.53	<0.53	<0.53		<0.53					<11	<0.53	
Isobutanol	-	-	ug/L	<14			<14	<14	<14		<14					<290	<14	
Methacrylonitrile	-	-	ug/L	<0.51			<0.51	<0.51	<0.51		<0.51					<10	<0.51	
Methyl methacrylate	-	-	ug/L	<0.44			<0.44	<0.44	<0.44		<0.44					<8.8	<0.44	
Methylene chloride	0.5	5	ug/L	2.8			<0.38	<0.38	<0.38		<0.38					<7.6	<0.38	
Propionitrile	-	-	ug/L	<1.2			<1.2	<1.2	<1.2		<1.2					<25	<1.2	
Styrene	10	100	ug/L	<0.37			15	6.4	<0.37		<0.37					<7.4	<0.37	
Tetrachloroethene	0.5	5	ug/L	1.1 Q			<0.41	<0.41	<0.41		<0.41					<8.2	0.45 Q	
Toluene	200	1000	ug/L	45000 D	<0.40	<0.40	75	<0.40	<0.40		<0.40		19	0.54 Q	130	440	2700 D	
trans-1,2-Dichloroethene	20	100	ug/L	1.4 Q			<0.64	<0.64	<0.64		<0.64					<13	<0.64	
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26			<0.26	<0.26	<0.26		<0.26					<5.2	<0.26	
trans-1,4-Dichloro-2-butene	-	-	ug/L	<0.24			<0.24	<0.24	<0.24		<0.24					<4.8	<0.24	
Trichloroethene	0.5	5	ug/L	4.5			<0.49	0.58 Q	<0.49		<0.49					<9.8	1.4 Q	
Vinyl acetate	-	-	ug/L	<0.70			<0.70	<0.70	<0.70		<0.70					<14	<0.70	
Vinyl Chloride	0.02	0.2	ug/L	4.6			<0.17	2.6	0.28 Q		<0.17					<3.4	8.9	
Xylene, o	1000	10000	ug/L	21000 D	<0.54	<0.54	390 D	2.0	<0.54		<0.54		1.3 Q	<0.54	2100 D	1800	15000 D	
Xylene, m, p	1000	10000	ug/L	64000 D	<0.77	<0.77	13000 D	54	<0.77		15		2200 D	730 D	11000 D	7400 D	35000 D	
Total VOCs			ug/L	151199.3	0.5		17876.0	1115.7	962.7	0.0	82.9		4155.4	739.7	17180	24219	59882	
July 1999 Total VOCs			ug/L	86330.0	1.4		8184.0	764.1	1182.3	0.0	85.2		5304.0	830.1	19910	16459	46415	

TABLE 1
MUNICIPAL WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 10-Oct-00
ENDING DATE: 12-Oct-00

(1) PAL = NR140 Preventative Action Limit
(2) ES = NR140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	MW-1-00-4 10/11/2000	MW-2-00-4 not sampled	MW-3-00-4 10/11/2000	MW-4-00-4 10/11/2000	DUP-1-00-4 10/11/2000 (MW-4-00-4)	TB-1-00-4 10/12/2000	FB-1-00-4 10/12/2000
1,1,1-Trichloroethane	40	200	ug/L	<0.53	~	<0.53	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	~	<0.68	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	~	<0.47	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	~	<0.34	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	~	<1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	~	<0.61	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	~	<3.1	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4.4	ug/L	<0.58	~	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	~	<0.94	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	~	<0.90	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	~	<0.43	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	~	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	~	<0.44	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	~	<0.46	<0.46	<0.46	<0.46	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	~	<0.50	<0.50	<0.50	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	~	<0.38	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	~	<0.37	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	~	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	200	1000	ug/L	<0.40	~	<0.40	<0.40	<0.40	<0.40	0.57 Q
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	~	<0.64	<0.64	<0.64	<0.64	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	~	<0.26	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	~	<0.49	<0.49	<0.49	<0.49	<0.49
Vinyl acetate			ug/L	<0.70	~	<0.70	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	<0.17	~	<0.17	<0.17	<0.17	<0.17	<0.17
Xylene, o	1000	10000	ug/L	<0.54	~	<0.54	<0.54	<0.54	<0.54	<0.54
Xylene, m, p			ug/L	<0.77		<0.77	<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.0	NS	0.0	0.0	0.0	0.0	0.57
April 2000 Total VOCs			ug/L	0.0	NS	0.0	0.0	0.0	5.3	--

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NS - Not Sampled

1/5/2001

TABLE 2
POTW AND RANNEY COLLECTOR RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 10/10/00
ENDING DATE: 10/12/00

Parameter	Units	POTW-I-00-4 10/11/2000	POTW-E-00-4 10/11/2000	POTW-S-00-4 10/11/2000	RC-1-00-4 10/11/2000	RC-2-00-4 10/11/2000	RC-3-00-4 10/11/2000
1,1,1-Trichloroethane	ug/L	<0.53	<0.53	<0.53			
1,1,2,2-Tretrachloroethane	ug/L	<0.68	<0.68	<0.68			
1,1,2-Trichloroethane	ug/L	<0.47	<0.47	<0.47			
1,1-Dichloroethane	ug/L	<0.61	<0.61	<0.61			
1,1-Dichloroethene	ug/L	<0.47	<0.47	<0.47			
1,2-Dichloroethane	ug/L	<0.54	<0.54	<0.54			
1,2-Dichloropropane	ug/L	<0.34	<0.34	<0.34			
2-Butanone	ug/L	1.4 Q	<1.2	2.7 Q			
2-Hexanone	ug/L	<0.61	<0.61	<0.61			
4-Methyl-2-pentanone	ug/L	<0.61	<0.61	<0.61			
Acetone	ug/L	56	<3.1	10			
Benzene	ug/L	<0.44	<0.44	<0.44	200	190 D	170 D
Bromodichloromethane	ug/L	<0.41	<0.41	<0.41			
Bromoform	ug/L	<0.58	<0.58	<0.58			
Bromomethane	ug/L	<0.94	<0.94	<0.94			
Carbon disulfide	ug/L	0.84 Q	<0.40	0.50 Q			
Carbon tetrachloride	ug/L	<0.90	<0.90	<0.90			
Chlorobenzene	ug/L	1.6	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	ug/L	<0.43	<0.43	<0.43			
Chloroethane	ug/L	<0.63	<0.63	<0.63			
Chloroform	ug/L	1.0 Q	<0.41	<0.41			
Chloromethane	ug/L	<0.44	<0.44	<0.44			
cis-1,2-Dichloroethene	ug/L	<0.46	<0.46	<0.46			
cis-1,3-Dichloropropene	ug/L	<0.54	<0.54	<0.54			
Ethylbenzene	ug/L	0.85 Q	<0.50	<0.50	24	27	22
Methylene chloride	ug/L	<0.38	<0.38	<0.38			
Styrene	ug/L	<0.37	<0.37	<0.37			
Tetrachloroethene	ug/L	<0.41	<0.41	<0.41			
Toluene	ug/L	25	0.42 Q	4.0	1.8	2.0	2.1
trans-1,2-Dichloroethene	ug/L	<0.64	<0.64	<0.64			
trans-1,3-Dichloropropene	ug/L	<0.26	<0.26	<0.26			
Trichloroethene	ug/L	<0.49	<0.49	<0.49			
Vinyl acetate	ug/L	<0.70	<0.70	<0.70			
Vinyl Chloride	ug/L	<0.17	<0.17	<0.17			
Xylene, o	ug/L	<0.54	<0.54	<0.54	56	57	58
Xylene, m, p	ug/L	1.5 Q	<0.77	<0.77	1700 D	2000 D	1800 D
1,3-Dichlorobenzene	ug/L	~	~	~	<0.64	<0.64	<0.64
1,2-Dichlorobenzene	ug/L	~	~	~	2.1	2.1	2.2
1,4-Dichlorobenzene	ug/L	~	~	~	<0.43	<0.43	<0.43
Total VOCs	ug/L	88.19	0.42	17.2	1983.9	2278.1	2054.3
April 2000 Total VOCs	ug/L	292.72	1.3	199	NS	1093	NS

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

D - Analyte value from diluted analysis.

NS - Not Sampled

TABLE 3

SUMMARY OF MONITORING WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 10/10/00
ENDING DATE: 10/12/00

(1) PAL = NR 140 Preventative Action Limit
(2) ES = NR 140 Enforcement Standard

Parameter	PAL (1)	ES (2)	Units	W-01A-00-4 10/11/2000	W-03A-00-4 10/11/2000	DUP3-00-4 10/11/2000 (W-03A-00-4)	W-03B-00-4 10/11/2000	W-04A-00-4 10/11/2000	W-07-00-4 10/11/2000	W-08R-00-4 no sample
1,1,1-Trichloroethane	40	200	ug/L	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	---
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	---
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	---
1,1-Dichloroethane	85	850	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	---
1,1-Dichloroethene	0.7	7	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47	---
1,2-Dichloroethane	0.5	5	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	---
1,2-Dichloropropane	0.5	5	ug/L	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	---
2-Butanone	90	460	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	---
2-Hexanone			ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	---
4-Methyl-2-pentanone	50	500	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61	---
Acetone	200	1000	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1	---
Benzene	0.5	5	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	---
Bromodichloromethane	0.06	0.6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	---
Bromoform	0.44	4.4	ug/L	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58	---
Bromomethane	1	10	ug/L	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94	---
Carbon disulfide	200	1000	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	---
Carbon tetrachloride	0.5	5	ug/L	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	---
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	---
Chlorodibromomethane	6	60	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43	---
Chloroethane	80	400	ug/L	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63	---
Chloroform	0.6	6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	---
Chloromethane	0.3	3	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44	---
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	<0.46	<0.46	<0.46	<0.46	<0.46	---
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	---
Ethylbenzene	140	700	ug/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
Methylene chloride	0.5	5	ug/L	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38	---
Styrene	10	100	ug/L	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37	---
Tetrachloroethene	0.5	5	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41	---
Toluene	200	1000	ug/L	<0.40	0.78 Q	0.80 Q	0.50 Q	0.89 Q	<0.40	---
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	<0.64	<0.64	<0.64	<0.64	<0.64	---
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	---
Trichloroethene	0.5	5	ug/L	<0.49	<0.49	<0.49	<0.49	<0.49	<0.49	---
Vinyl acetate			ug/L	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70	---
Vinyl Chloride	0.02	0.2	ug/L	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	---
Xylene, o	1000	10000	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54	---
Xylene, m, p			ug/L	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77	---
Total VOCs			ug/L	0.0	0.78	0.80	0.50	0.89	0.0	NS
April 2000 Total VOCs			ug/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NS-Not sampled

TABLE 3 CONTINUED
SUMMARY OF MONITORING WELL RESULTS

PROJECT NUMBER: 11035-387
BEGINNING DATE: 10/10/00
ENDING DATE: 10/12/00

(1) PAL = NR 140 Preventative Action Limit
(2) ES = NR 140 Enforcement Standard

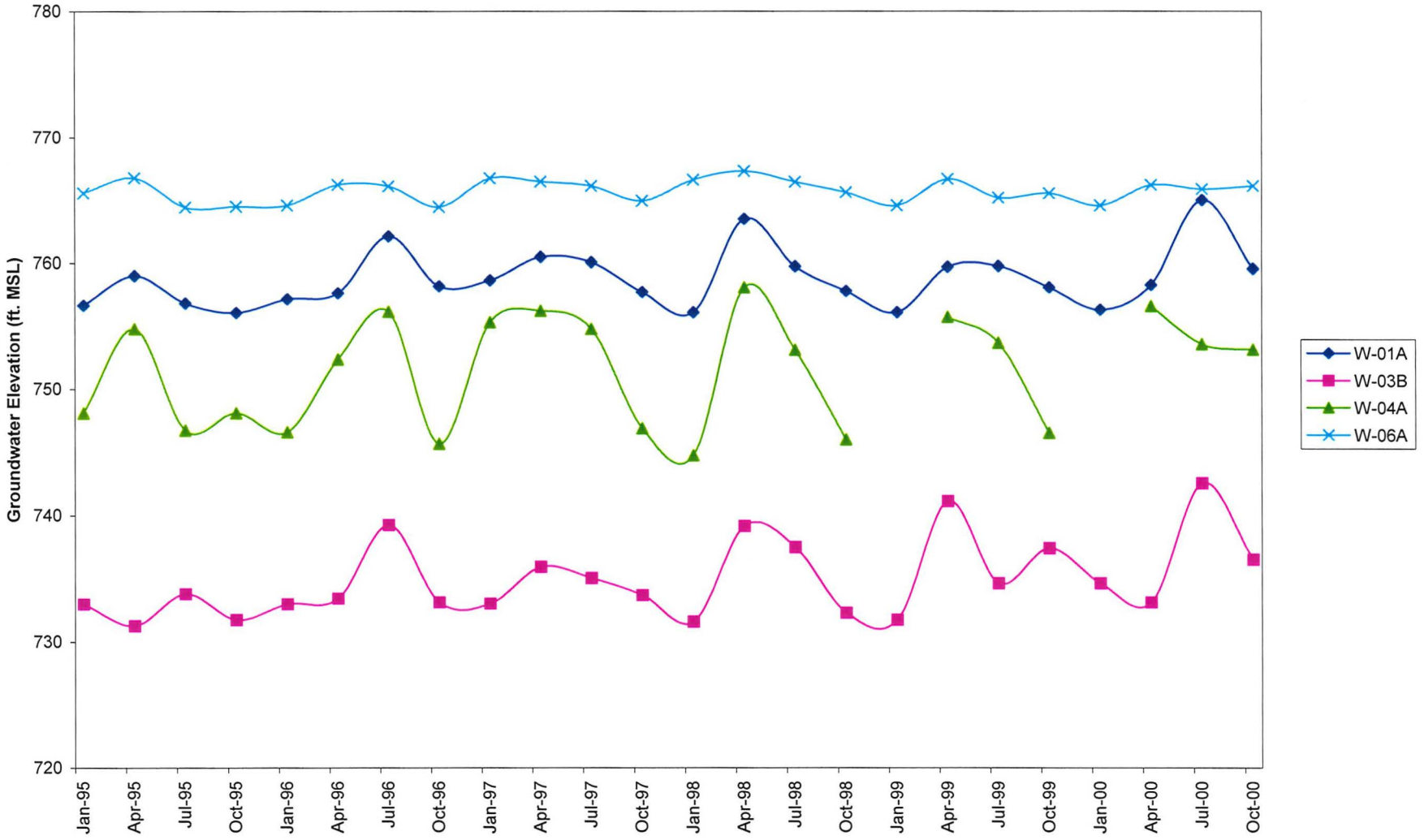
Parameter	PAL (1)	ES (2)	Units	W-20-00-4 10/12/2000	W-22-00-4 10/12/2000	W-23-00-4 10/11/2000	DUP-2-00-4 10/11/2000 (W-23-00-4)	W-27-00-4 10/12/2000	PW-08-00-4 10/12/2000
1,1,1-Trichloroethane	40	200	ug/L	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53
1,1,2,2-Tretrachloroethane	0.02	0.2	ug/L	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68
1,1,2-Trichloroethane	0.5	5	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,1-Dichloroethane	85	850	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
1,1-Dichloroethene	0.7	7	ug/L	<0.47	<0.47	<0.47	<0.47	<0.47	<0.47
1,2-Dichloroethane	0.5	5	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
1,2-Dichloropropane	0.5	5	ug/L	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34
2-Butanone	90	460	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone			ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
4-Methyl-2-pentanone	50	500	ug/L	<0.61	<0.61	<0.61	<0.61	<0.61	<0.61
Acetone	200	1000	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<3.1
Benzene	0.5	5	ug/L	<0.44	<0.44	6.1	6.3	<0.44	<0.44
Bromodichloromethane	0.06	0.6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Bromoform	0.44	4.4	ug/L	<0.58	<0.58	<0.58	<0.58	<0.58	<0.58
Bromomethane	1	10	ug/L	<0.94	<0.94	<0.94	<0.94	<0.94	<0.94
Carbon disulfide	200	1000	ug/L	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Carbon tetrachloride	0.5	5	ug/L	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
Chlorobenzene	20	100	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chlorodibromomethane	6	60	ug/L	<0.43	<0.43	<0.43	<0.43	<0.43	<0.43
Chloroethane	80	400	ug/L	<0.63	<0.63	<0.63	<0.63	<0.63	<0.63
Chloroform	0.6	6	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Chloromethane	0.3	3	ug/L	<0.44	<0.44	<0.44	<0.44	<0.44	<0.44
cis-1,2-Dichloroethene	7	70	ug/L	<0.46	<0.46	1.7	1.7	18	<0.46
cis-1,3-Dichloropropene	0.02	0.2	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Ethylbenzene	140	700	ug/L	<0.50	<0.50	<0.50	<0.54	<0.50	<0.50
Methylene chloride	0.5	5	ug/L	<0.38	<0.38	<0.38	<0.38	<0.38	<0.38
Styrene	10	100	ug/L	<0.37	<0.37	<0.37	<0.37	<0.37	<0.37
Tetrachloroethene	0.5	5	ug/L	<0.41	<0.41	<0.41	<0.41	<0.41	<0.41
Toluene	200	1000	ug/L	0.59 Q	0.63 Q	0.47 Q	0.50 Q	0.41 Q	0.48 Q
trans-1,2-Dichloroethene	20	100	ug/L	<0.64	<0.64	<0.64	<0.64	0.74 Q	<0.64
trans-1,3-Dichloropropene	0.02	0.2	ug/L	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26
Trichloroethene	0.5	5	ug/L	<0.49	<0.49	<0.49	<0.49	100	<0.49
Vinyl acetate			ug/L	<0.70	<0.70	<0.70	<0.70	<0.70	<0.70
Vinyl Chloride	0.02	0.2	ug/L	0.36 Q	<0.17	<0.17	<0.17	<0.17	<0.17
Xylene, o	1000	10000	ug/L	<0.54	<0.54	<0.54	<0.54	<0.54	<0.54
Xylene, m, p			ug/L	<0.77	<0.77	<0.77	<0.77	<0.77	<0.77
Total VOCs			ug/L	0.95	0.63	8.27	8.50	119.15	0.48
April 2000 Total VOCs			ug/L	0.0	1.4	12.74	13.12	115	0.0

Indicates concentration in exceedance of Preventative Action Limit
Indicates concentration in exceedance of Enforcement Standard

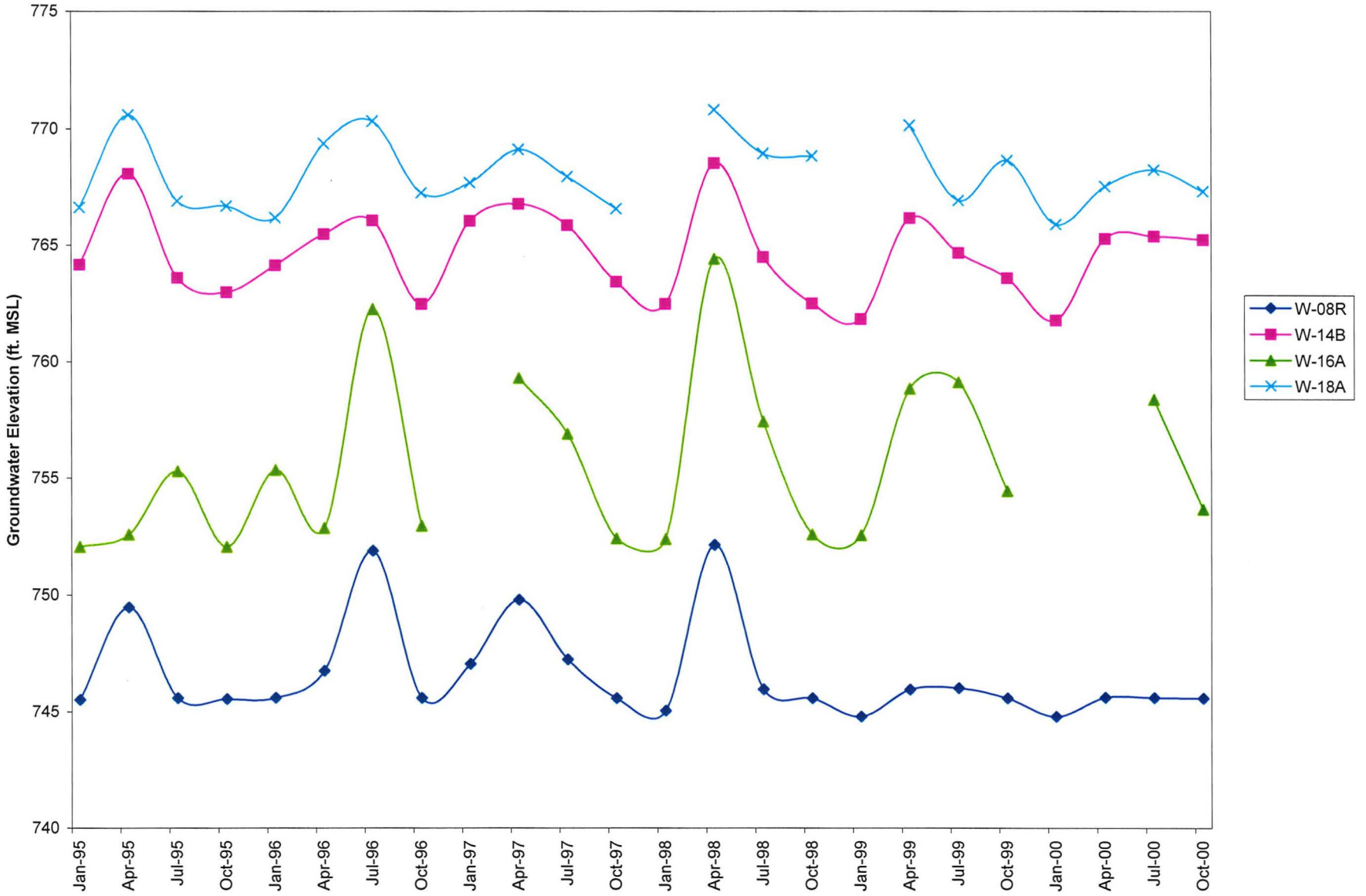
Q - The analyte has been detected between the Limit of Detection (LOD) and the Limit of Quantitation (LOQ). The results are qualified due to the uncertainty of the analyte concentrations within this range.

NOTE: DATA QUALIFIERS ARE DISCUSSED IN APPENDIX B.

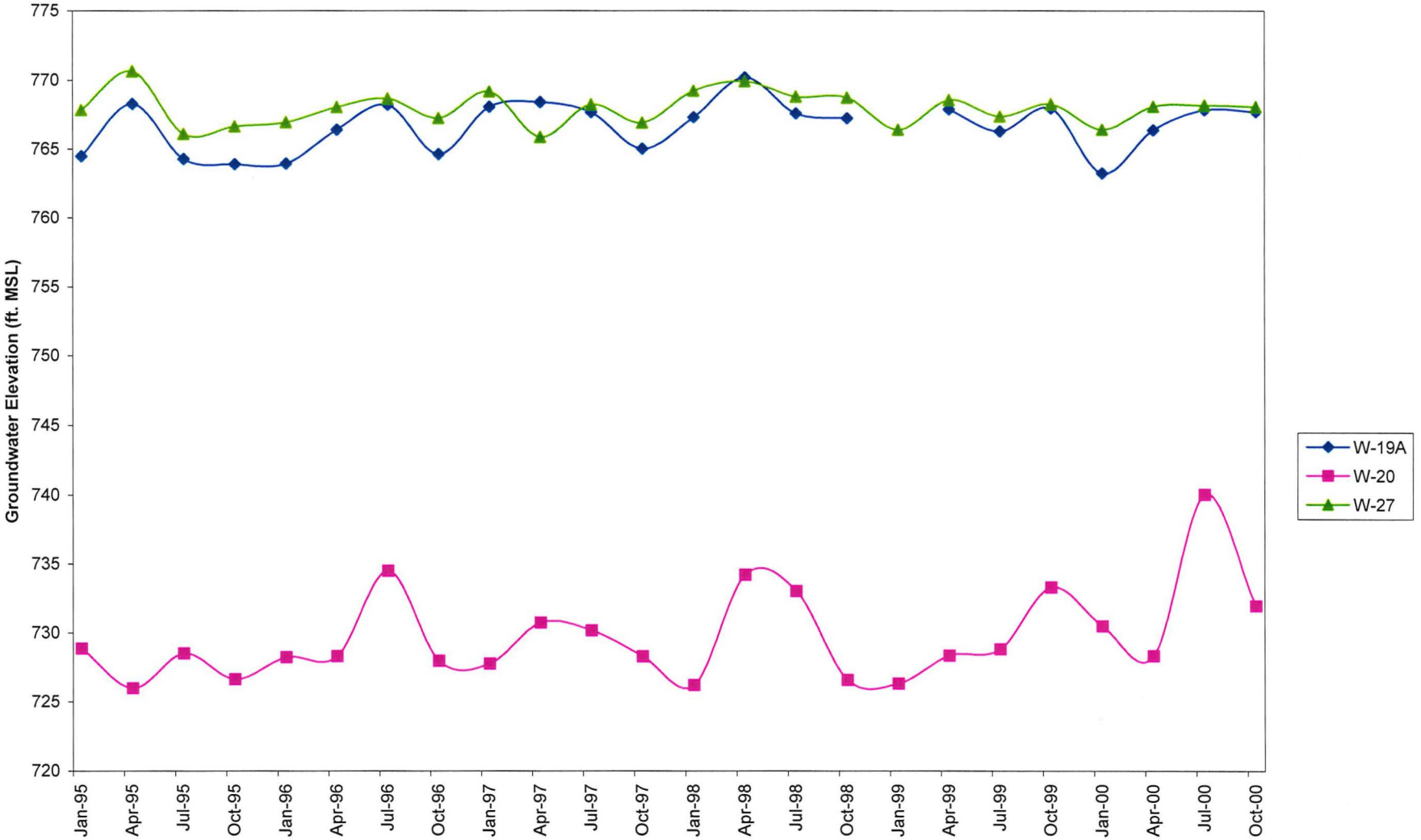
Groundwater Elevation Trends
Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



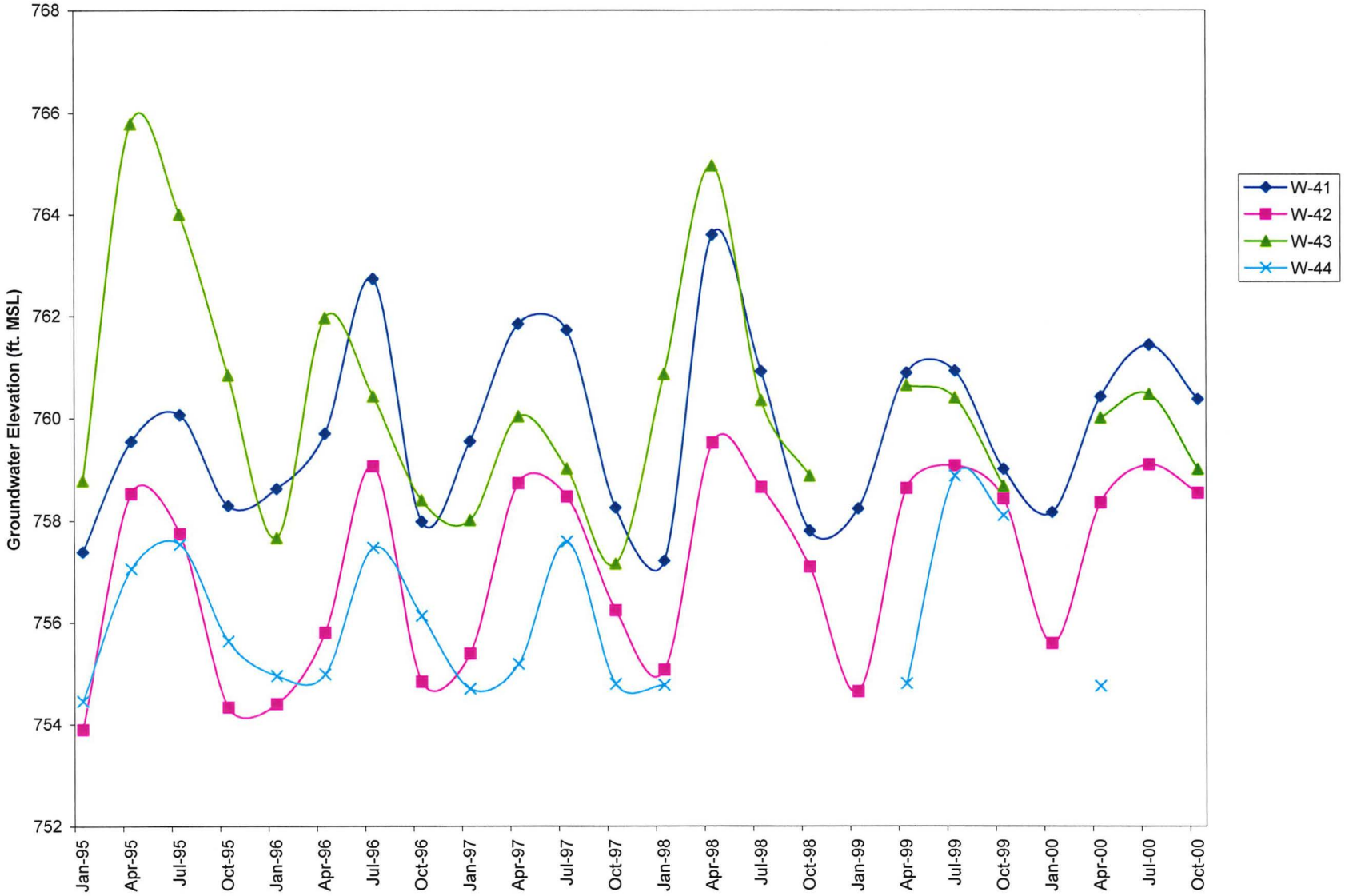
Groundwater Elevation Trends
Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



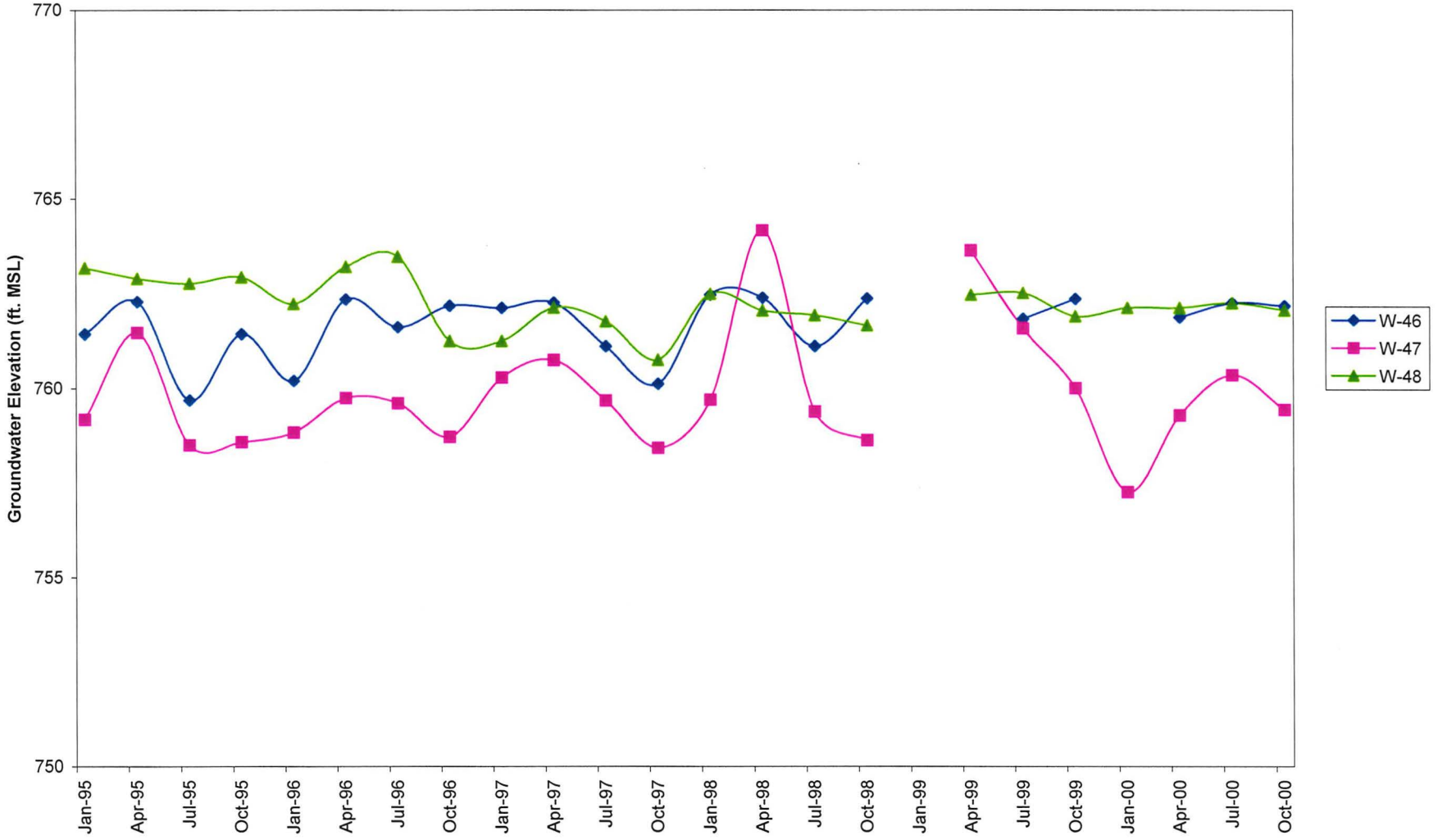
Groundwater Elevation Trends
Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



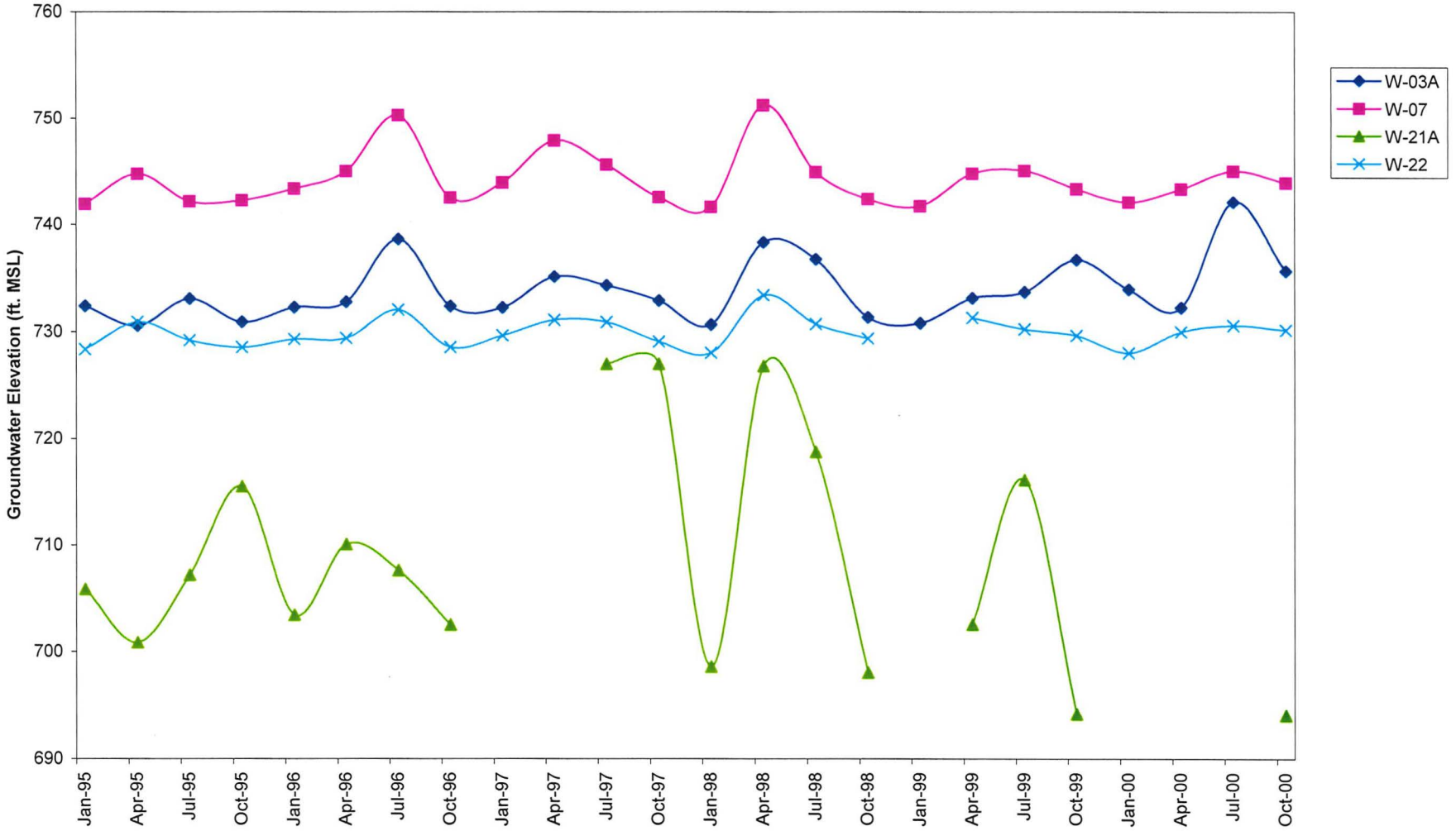
Groundwater Elevation Trends
Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



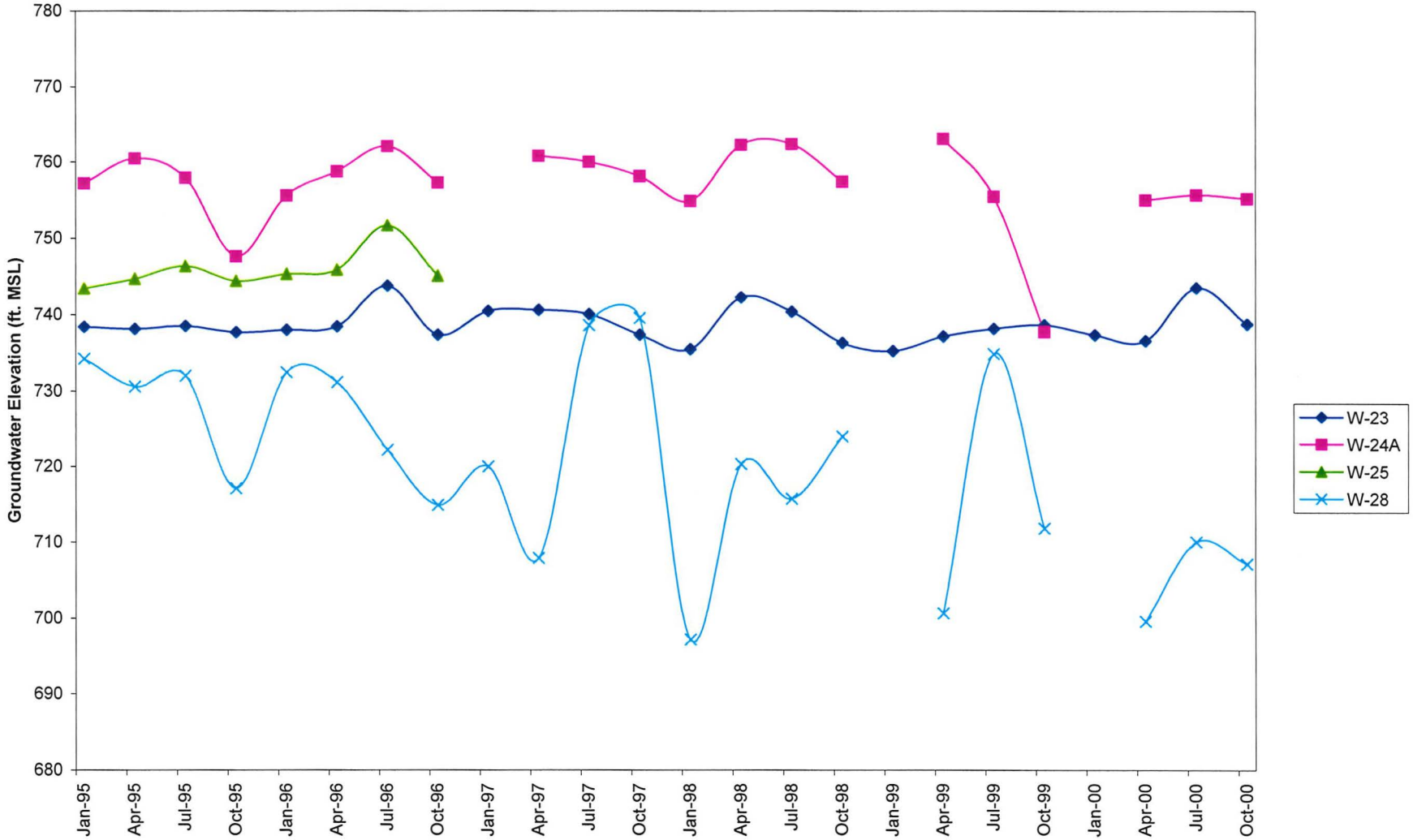
Groundwater Elevation Trends
Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



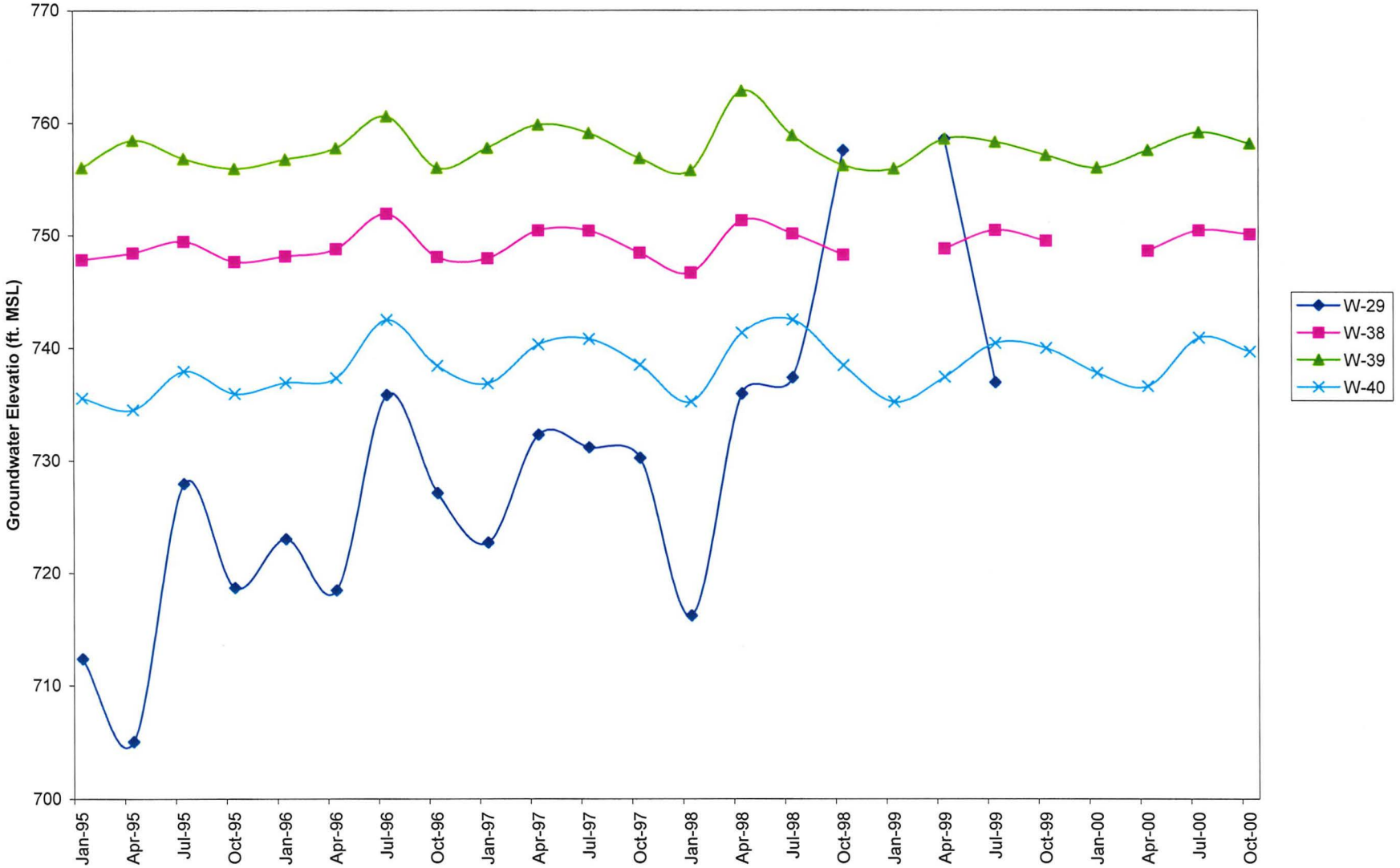
Groundwater Elevation Trends
Shallow Dolomite Wells, 1995 to 2000
Cook Composites and Polymers Co.



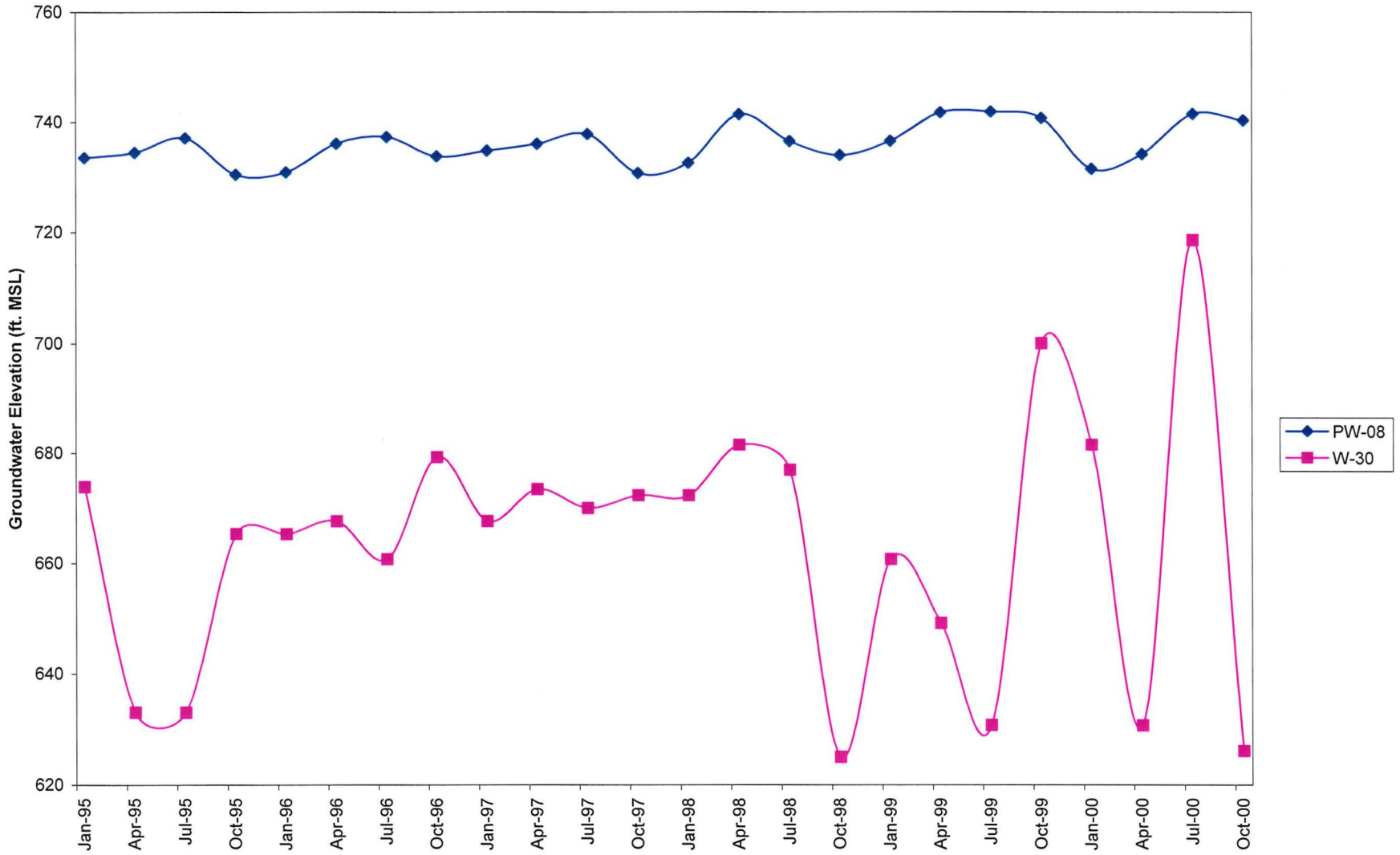
Groundwater Elevation Trends
Shallow Dolomite Wells, 1995 to 2000
Cook composites and Polymers Co.



Groundwater Elevation Trends
Shallow Dolomite Wells, 1995 to 2000
Cook Composites and Polymers Co.



Groundwater Elevation Trends
Deep Dolomite Wells, 1995 to 2000
Cook Composites and Polymers Co.



Hydrogeological Calculations
Summer 2000

Horizontal Gradient

Glacial Drift Unit

$$i = \frac{dH}{dL} = \frac{760\text{-}745}{730} = 0.021 \quad \text{(eastward)}$$

Vertical Gradient

Between glacial drift unit and shallow dolomite unit

W-18A/W-22

Center D = (772.53-66) + 0.5(40) = 726.53

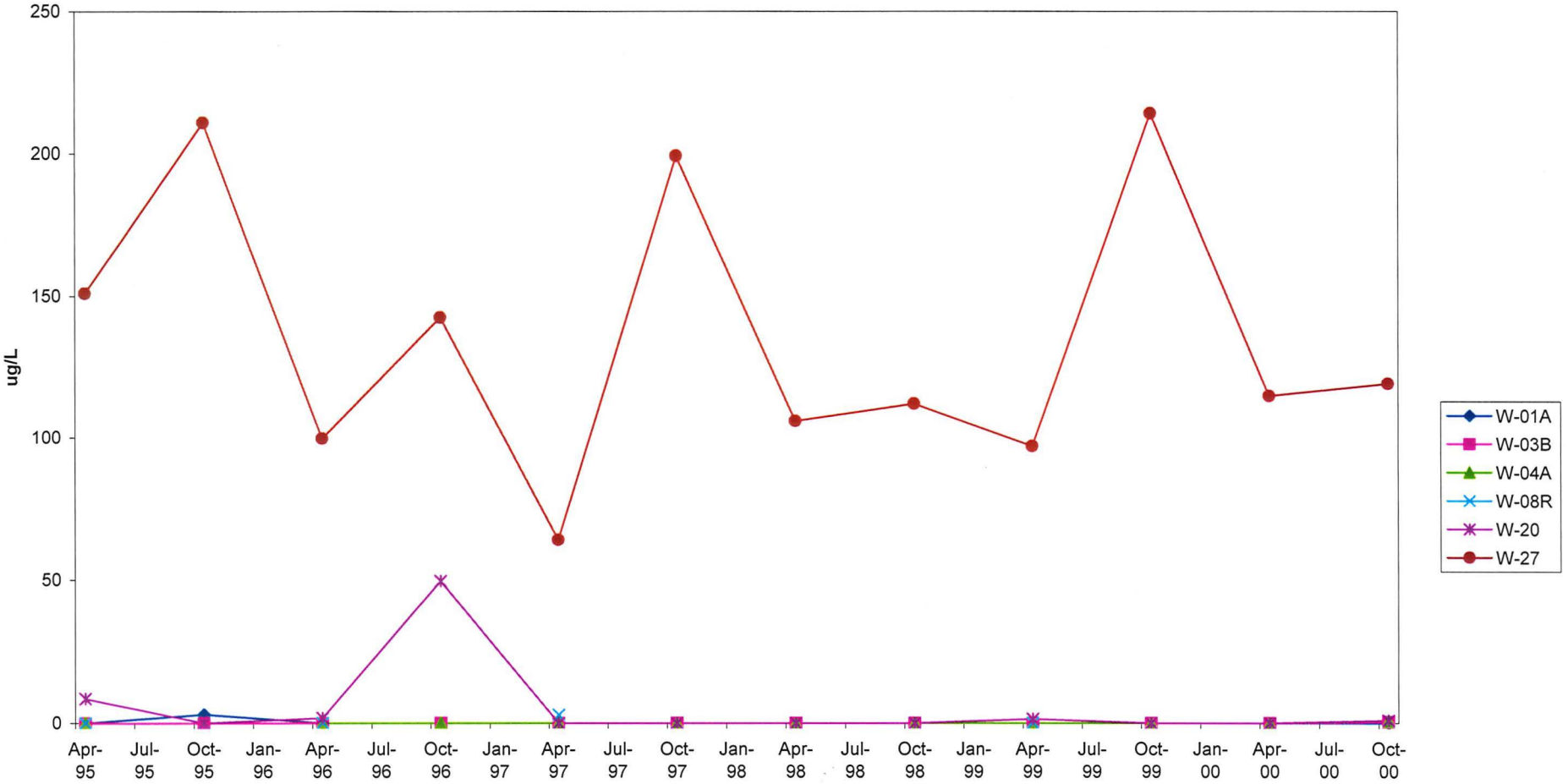
$$Iv = \frac{WLS - WLD}{WLD - Center\ D} = \frac{768.24 - 730.57}{768.24 - 726.53} = 0.9 \quad \text{(downward)}$$

W-43/W-38

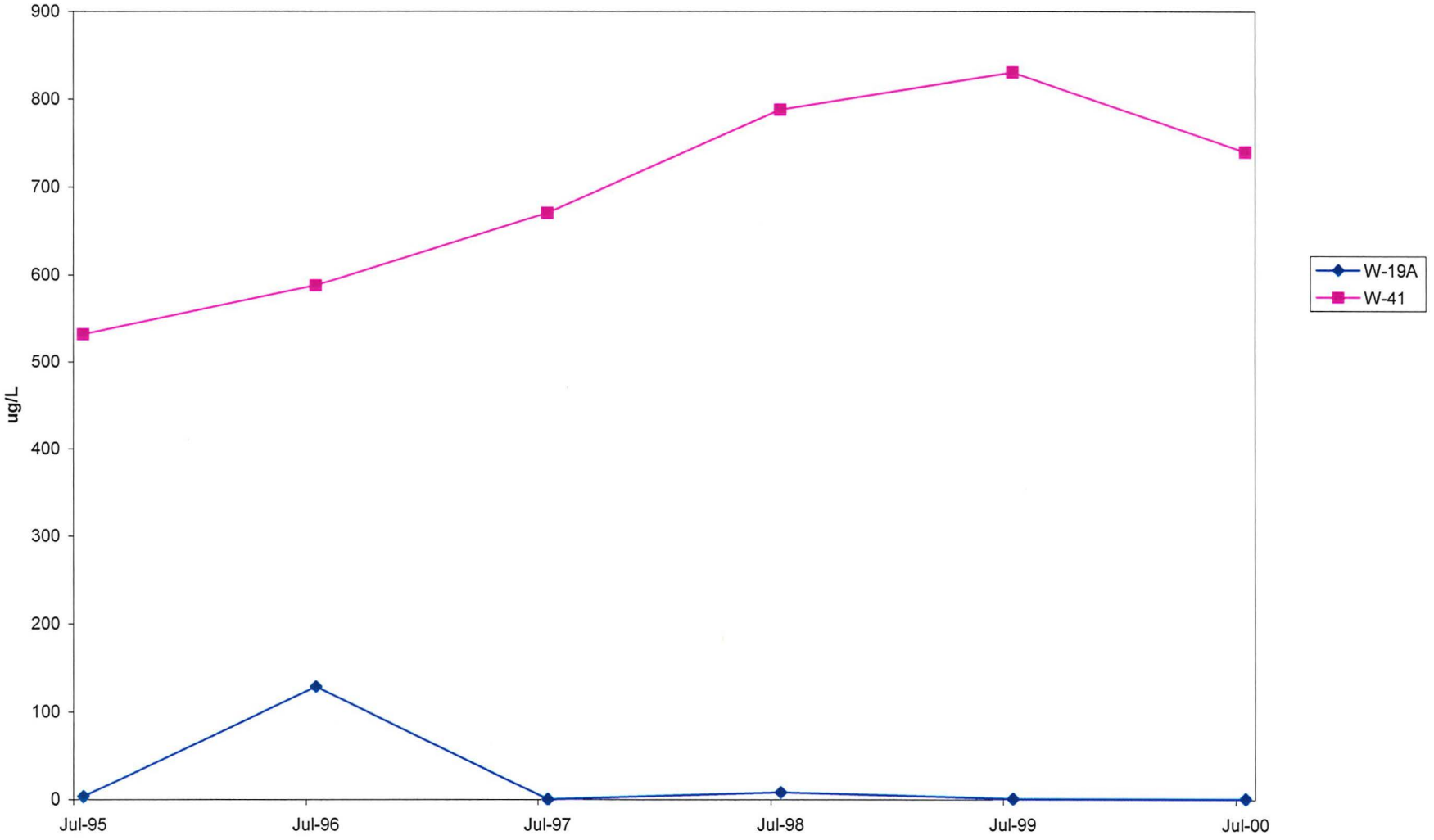
Center D = (770.98-49.00) + 0.5(16.8) = 730.38

$$Iv = \frac{WLS - WLD}{WLD - Center\ D} = \frac{760.46 - 750.41}{760.46 - 730.38} = 0.33 \quad \text{(downward)}$$

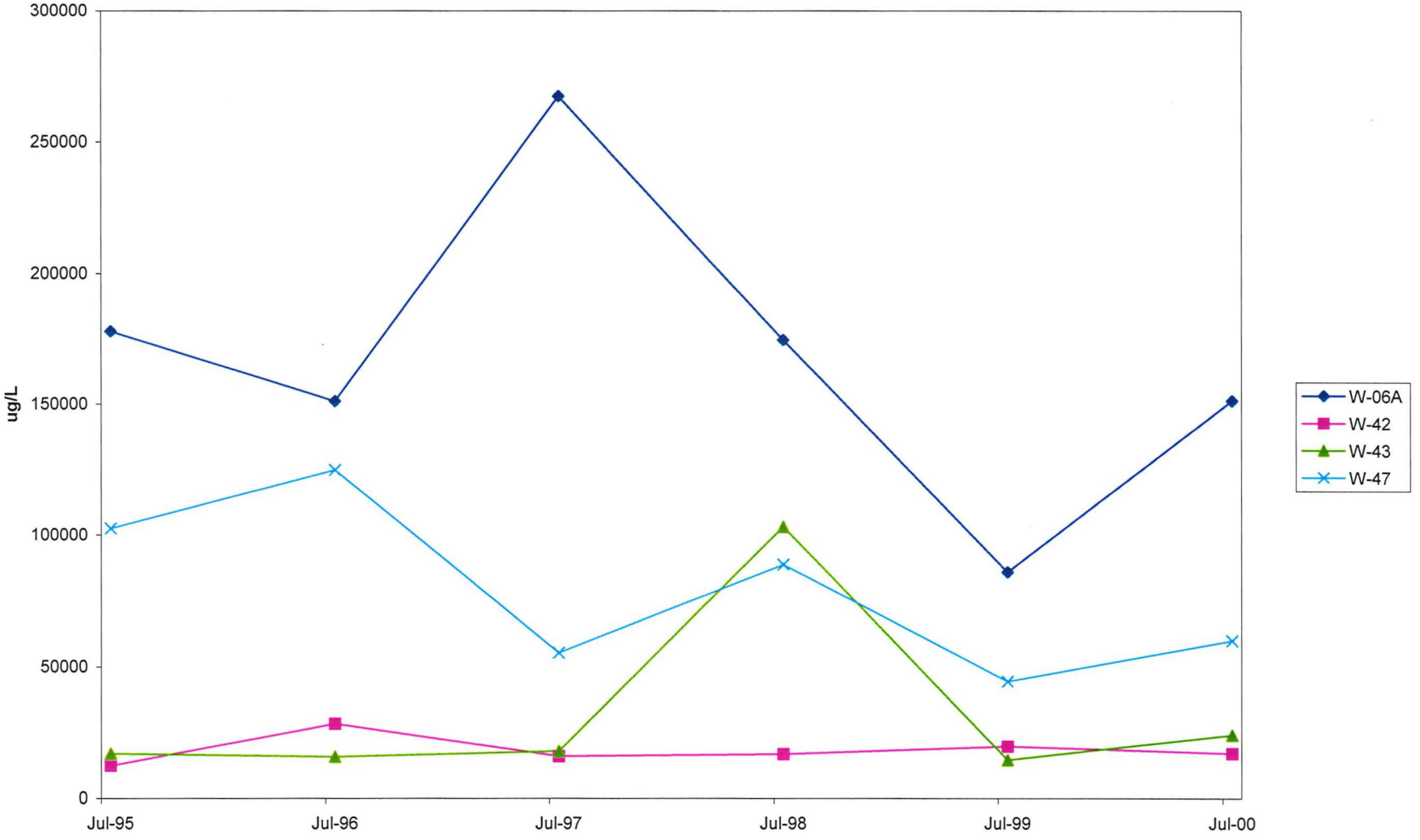
Total VOC Trends
Perimeter Glacial Wells, 1995 to 2000
Cook Composites and Polymers Co.



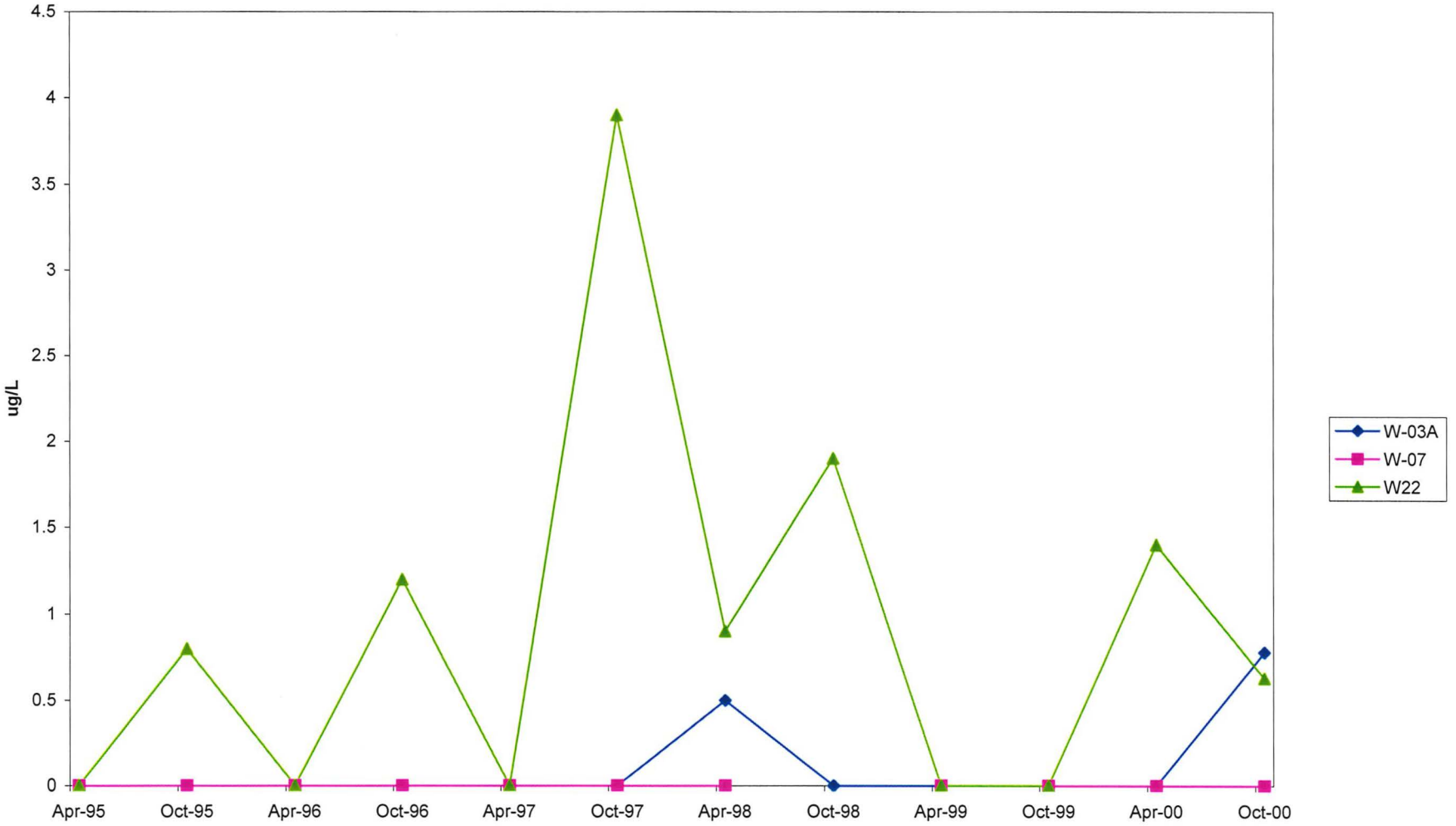
Total VOC Trends
Glacial Drift Progress Wells, 1995 to 2000
Cook Composites and Polymers Co.



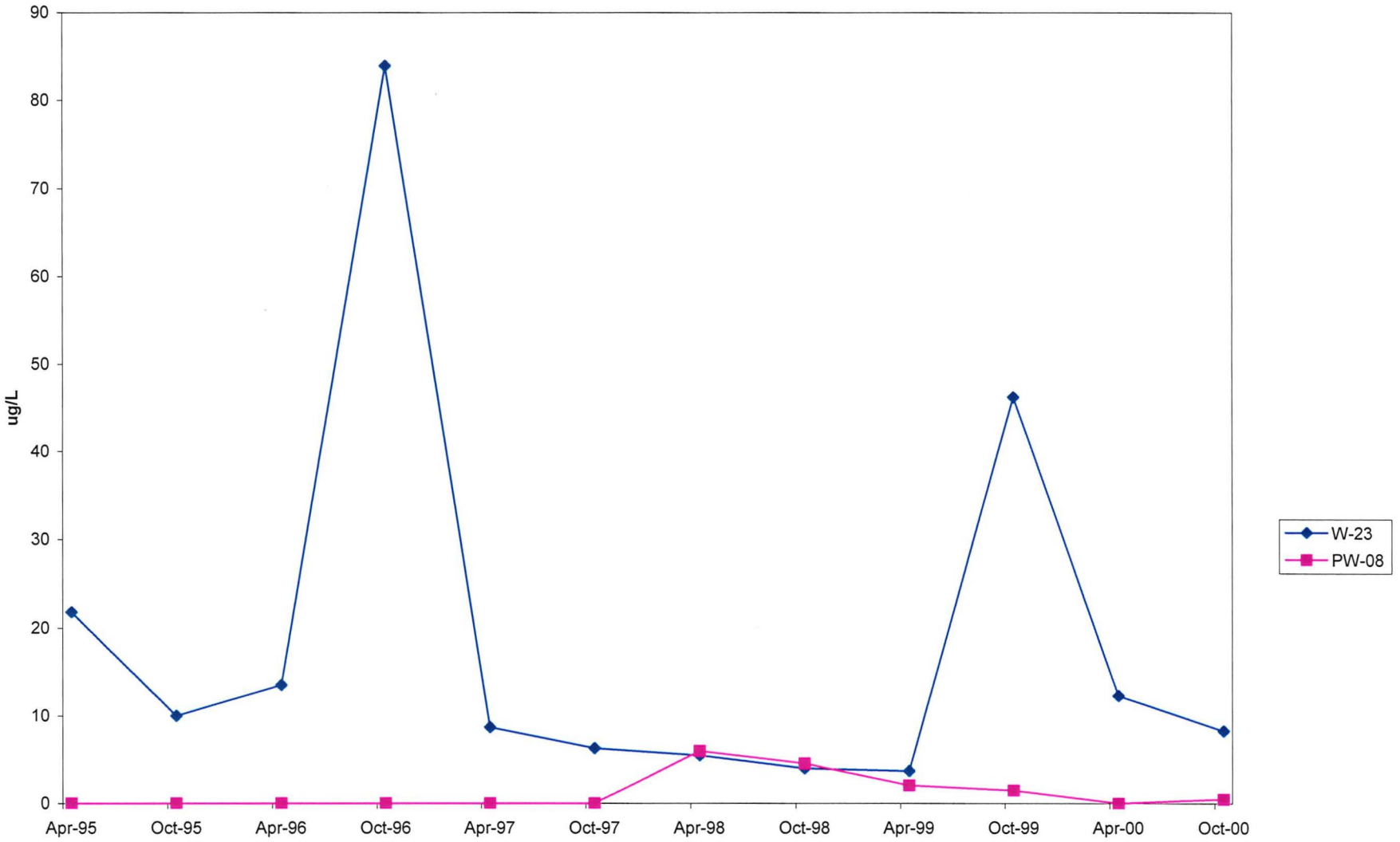
Total VOC Trends
Glacial Drift Progress Wells, 1995 to 2000
Cook Composites and Polymers Co.



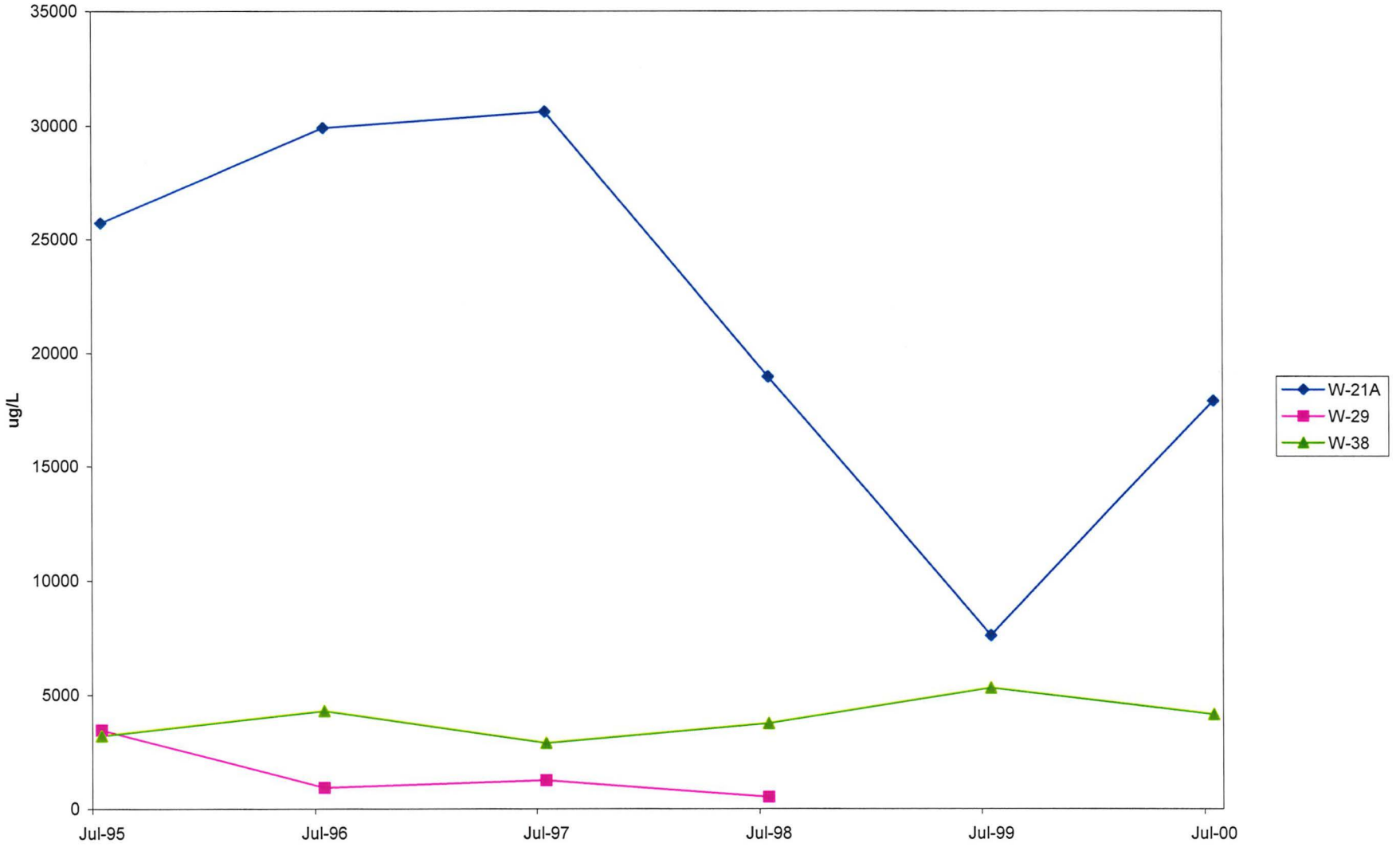
Total VOC Trends
Perimeter Dolomite Wells, 1995 to 2000
Cook Composites and Polymers Co.



Total VOC Trends
Perimeter Dolomite Wells, 1995 to 2000
Cook Composites and Polymers Co.



Total VOC Trends
Dolomite Progress Wells, 1995 to 2000
Cook Composites and Polymers Co.



Total VOC Trends
Dolomite Progress Wells, 1995 to 2000
Cook Composites and Polymers Co.