Form 168 9/92

ANNUAL MONITORING REPORT – 2002/2003

PAYNESVILLE MUNICIPAL WATER SUPPLY – MPCA
PAYNESVILLE, MINNESOTA
MPCA SITE ID # LEAK00000131

Terracon Project No. 41987018
May 23, 2003

Prepared for:

MINNESOTA POLLUTION CONTROL AGENCY
Majors and Remediation Division
Petroleum and Landfill Remediation Section
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Terracon

4B. The hydrographs illustrate season fluctuations in groundwater elevations, and in the case of wells CMW-42 (42) and DW-5 (45) (Figure 4A) the results of groundwater pumping activities.

Groundwater samples were collected from City Well CW-4(10), Water Treatment Plant Influent, and Water Treatment Plant Effluent on a monthly basis for laboratory analysis. Two samples continued to be taken from the water treatment plant effluent as this is chlorinated water which occasionally reacts with the HCl. One water treatment plant effluent sample included HCl as a preservative; the other effluent sample did not contain the HCl preservative to allow the laboratory to analyze an unpreserved sampling if the holding time (7 days) permits . Groundwater samples were collected from monitoring wells DW-3 (3), DW-6 (46), recovery well DW-5(45), and City Well CW-3 on a quarterly basis; from monitoring wells DW-7S(48), DW-7D(49) on a semi-annual basis and from City Wells CW-5 through CW-8 on an annual basis for laboratory analysis during this reporting period. The quarterly water sample was not collected from DW-5 (46) during the August site visit because the pump would not start. Groundwater samples were collected from the city wells via sampling taps after minimal purging. Groundwater samples were collected from the monitoring wells after purging three to five well volumes using disposable bailers, dedicated plastic purge pumps with polyethylene tubing or a Grundfos Redi-Flow 2 sampling pump with dedicated polyethylene tubing as described in the attached sampling forms. The laboratory results are summarized in Table 3. Laboratory reports and the sampling information forms are included in Appendix D.

The quarterly groundwater samples from City Well CW-3 and the annual water samples from City Wells CW-5, CW-6, CW-7, and CW-8 exhibited non-detectable concentrations of target volatile organic compounds. Laboratory analysis of the water treatment plant influent samples detected 0.33 ug/l of benzene in the November 5, 2002 sample and 0.92 ug/l of chloroform in the February 6, 2003 sample. Laboratory analysis detected 0.24 ug/l and 0.43 ug/l of benzene in the November 5, 2002 and the February 6, 2003 samples collected from the water treatment plant effluent. Volatile organic compounds detected in the water treatment plant influent and effluent samples did not reveal a pattern and the origin for the detected compounds could not be identified through analytical results from the city wells. It is possible that the sand filter in the water treatment plant contains residual concentrations of benzene that are periodically detected in the effluent samples.

Water samples were collected on a quarterly basis from City Well CW-4 and analyzed for total lead. Laboratory analysis detected a lead concentration between the MDL and the PQL in two of the samples.

Groundwater samples from City Well CW-4 have shown consistent detection of benzene and periodic detection of 1,2-DCA over the last 12 months. The most notable trend in the City Well CW-4 analytical results is that the benzene concentration has increased from a

concentration between the Method Detection Limit (MDL) and Practical Quantification Limit (PQL) to a concentration of 13 ug/l in the March 6, 2003 sample. The steady and ongoing increase in the benzene concentration coincides with increased pumping activity of City Well CW-4. Before December 20, 2001 the pumping rate of City Well CW-4 was approximately 75 gallons per minute (gpm) for twelve hours followed by twelve hours of not pumping. On December 20, 2001, pumping activities of City Well CW-4 were increased to 125 gpm continuously for 24 hours. The increased pumping activity of City Well CW-4 appeared to drawing the contamination plume further to the north than was occurring at the lower pumping rate. During early July 2002 the pumping rate was reduce to approximately 95 gpm.

Increased pumping of City Well CW-4 was initiated in response to a rising benzene concentration in groundwater samples collected from monitoring well DW-3. Contaminant concentrations in groundwater samples from monitoring well DW-3 have decreased since the pumping rate was increased at City Well CW-4. In fact, laboratory analysis has not detected the target volatile organic compounds in the samples from DW-3 since January 2002 and therefore the pumping rate of City Well CW-4 was reduced during July 2002. Monitoring wells DW-7S and DW-7D are located between monitoring well DW-3 and the city wells CW-5 through CW-7. Monitoring wells DW-7S and DW-7D were installed as sentinel wells between the Midtown Auto site and City Wells CW-5, CW-6 and CW-7. Groundwater samples collected from monitoring wells DW-7S and DW-7D exhibited non-detectable concentrations of target volatile organic compounds.

Pumping was discontinued at recovery well DW-5 on May 23, 2002 as proposed in the previous annual report. Water has not been pumped from DW-5 during this reporting period, other than to collect water samples for laboratory analysis. Contaminant concentrations at well DW-5 have generally increased since pumping was discontinued. The benzene concentration has increased from 98 ug/l in April 2002 to 350 ug/l in April 2003. The contaminant concentrations have generally been decreasing at nearby monitoring DW-6 since pumping was discontinued at recovery well DW-5. The benzene concentration has decreased to 23 ug/l and the remaining target analytes were not detected in the April 2003 sample. Groundwater analytical data from monitoring wells MW-16 (27) and MW-17 (28) obtained from the Cirrus Environmental Group, Inc. (Cirrus) "Annual Monitoring Report" dated October 24, 2002 has been included in Table 3. Apparently Cirrus sampled the monitoring wells on occasion during March 2002 when 2.5 ug/l of benzene was detected in the sample from monitoring well MW-17 (28). .

Terracon coordinated the completion of a packer test at City Well CW-4 on September 23, 2002. Thein Well Company installed two packers in an attempt to isolate specific sampling intervals (70 to 80, 80 to 90, 90 to 100 and 100 to 110 feet). Water was purged from the specified intervals for approximately 15 minutes at rates of 10 to 11 gallons per minute and the samples were collected for laboratory analysis. Laboratory analysis detected benzene

and toluene in each of the samples. The benzene concentration ranged from 5.3 ug/l in the 70 to 80 foot sample to 8.2 ug/l in the 100 to 110 foot sample. Trichloroethene was detected at 0.61 ug/l in the 70 to 80 foot sample. GRO was not detected in the four water samples. The packer test did not isolate an interval which is more highly contaminated. Based on the consistency of the data, it is possible that water short-circuited the packers by flowing through the filter pack or a large volume of water needed to be pumped before obtaining greater variations in the VOC concentrations. A 20 foot section of the drop pipe was found to have a hole just above the pump and was not reinstalled in City Well CW-4 resulting in the pump being raised up higher in the well screen. There is currently 40 feet drop pipe installed in the well.

Section 2. VAPOR IMPACT MONITORING

If vapor impacts were detected during previous assessments, discuss the results of follow-up vapor monitoring. Include in your discussion the sampling instrument and sampling method.

No new vapor surveys were conducted during the 2002/ 2003monitoring period.

NOTE: If vapor concentrations exceed 10 percent of the lower explosive limit, exit the building and contact the local fire department immediately. Then contact the Minnesota Duty Officer (24 hours) at 651/649-5451 (metro and outside Minnesota) or 1-800/422-0798 (Greater Minnesota). TTY users call 651/297-5353 (V/TTY) or 1-800/627-3529 (V/TTY). **Vapor mitigation is required.**

Section 3. RECOMMENDATIONS

Discuss your recommendations. Your recommendation should be based on fact sheet #3.1, *Leaking Underground Storage Tank Program.*

If additional corrective action is recommended, please provide your justification.
N/A

If significant reduction of risk has been achieved at the site, recommendations and rationale for the reduction or termination of corrective actions may be presented.
N/A

If additional monitoring is recommended, indicate the proposed monitoring schedule and frequency.

Groundwater quality data collected from City Well CW-4 and monitoring well DW-3 suggests that the contamination plume is responsive to city well pumping activities and that

plume migration may be influence by city well pumping rates. The increased pumping activity of City Well CW-4 on December 20, 2001 from approximately 75 gpm for 12 hours per day, to 125 gpm continuously for 24 hours per day (reduced to approximately 95 gpm in during July 2002) appears to have contributed to decreased concentrations of contaminants in groundwater samples from monitoring well DW-3. In addition, the higher pumping rate of City Well CW-4 resulted in increased contaminant concentrations in the discharge water. Decreasing the depth of the pump in City Well CW-4 may have also resulted in increased contaminant concentrations in the discharge water. It is our understanding that City Well CW-8 is on-line on a full time basis and City Well CW-5, CW-6 and CW-7 are used on an alternating basis.

The current pumping rate of City Well CW-4 of approximately 95 gpm appears to be controlling contamination plume migration in the direction of City Wells CW-5 through CW-7. However, the pumping rate of City Well CW-4 should be limited so that it does not promote excessive migration of the contaminant plume further to the north or downward into the drinking water aquifer. The current pump installed in the well can not be operated at lower pumping rates. Continued analysis of samples from the water treatment plant, city wells, and select monitoring wells should be performed in order to monitor the quality of the water supply and contaminant plume stability or migration.

Groundwater quality data collected from wells DW-5, DW-6 and MW-17 suggest that although previous pumping activities at recovery well DW-5 have decreased petroleum concentrations at the location of the well, the impact from these activities was likely limited in extent. Terracon recommends that pumping activities remain suspended and that groundwater quality data be collected to assess whether there is substantial additional rebound of petroleum concentrations. Prior attempts to find an alternative location for the recovery well system near to the source area (the Midtown site) have been unsuccessful.

Specifically, Terracon recommends the following activities:

- *Continue groundwater extraction activities utilizing City Well CW-4 to contain the petroleum plume. Continue to adjust the pumping rate of City Well CW-4 in order to establish an extraction rate that prevents the excessive migration of the contaminant plume in the direction of either CW-4 or wells DW-3, DW-7S, DW-7D, and CW-5 through CW-7. Evaluate the installation of a pump to can operate at between 75 gpm and 125 gpm, should the current pump fail.*

- *Collect quarterly groundwater samples from City Wells CW-4, water treatment plant influent, and water treatment effluent.. The groundwater samples should be analyzed for the Minnesota Department of Health (MDH) list of VOCs and pH. This may require submitting a request to the MPCA that the NPDES Permit be changed to quarterly*

SYSTEM CHANGES

Describe in detail any changes in system operation or configuration made during this reporting period (attach additional pages if needed). Also explain any periods during which the system was not operating.

The groundwater pump out system on well DW-5 remained operating (pumping) during this reporting period until the April 2002 site visit when the well pump was found to produce only a few gallons of water before tripping off. The pump controller repeatedly tripped off suggesting that the motor has failed. Prior to the site meeting on April 29, 2002 the system was checked and found to not be pumping water. MPCA and Terracon staff agreed the pumping activities at well DW-5 should be suspended and while groundwater sampling activities continued. The pump was checked by Thein Well Company on August 23, 2002 and found to be in good condition. The control system was rewired on September 18, 2002 by MRSI to allow well DW-5 to be sampled using the pump. Apparently the pump controller had failed. Additional operational problems did not occur during this monitoring period

Pumping activities associated with City Well CW-4 are summarized in Fact Sheet 3.26.

RECOMMENDATIONS

List recommendations for modifying the monitoring schedule, system operation, system configuration or site closure (attach additional pages if needed):
See Fact Sheet 3.26

OBSERVATIONS

Please provide observations made at the site and describe unusual circumstance that may have influenced the sampling results:
See system changes and Fact Sheet 3.26.

TABLES & GRAPHS

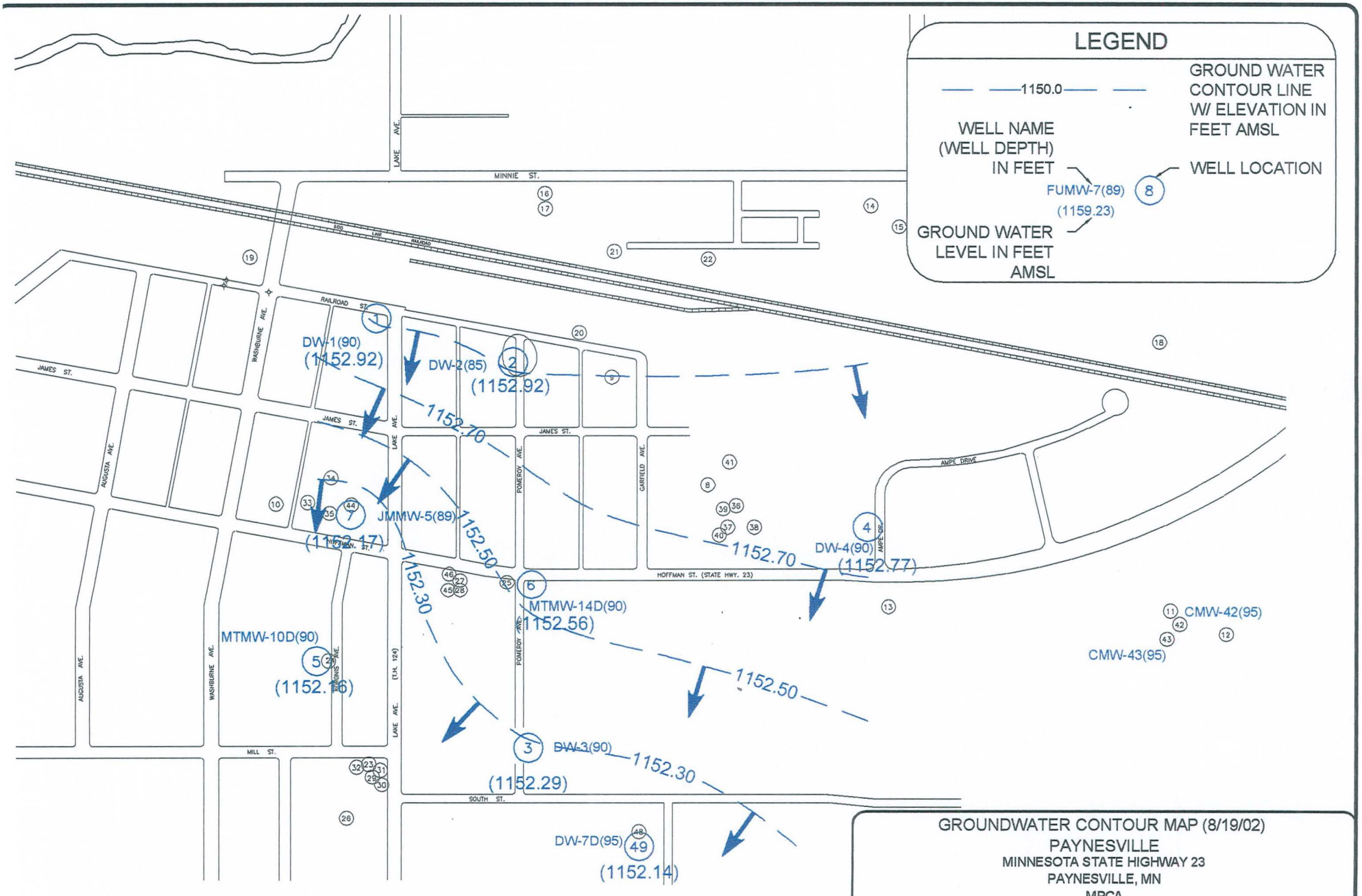
Tables and graphs as requested above.

Web pages and phone numbers	
MPCA staff	http://data.pca.state.mn.us/pca/emplsearch.html
MPCA toll free	**1-800-657-3864**
LUST web page	http://www.pca.state.mn.us/programs/lust_p.html
MPCA Infor. Request	http://www.pca.state.mn.us/about/inforequest.html
PetroFund Web Page	http://www.commerce.state.mn.us/mainpf.htm
PetroFund Phone	**651-297-1119**, or **1-800-638-0418**
State Duty Officer	**651-649-5451 or 1-800-422-0798**

N:\98\98_7018\018_3_31(2003).DOC

Upon request, this document can be made available in other formats, including Braille, large print and audio tape. TTY users call 651/282-5332 or Greater Minnesota 1-800/657-3864.

Printed on recycled paper containing at least 10 percent fibers from paper recycled by consumers.

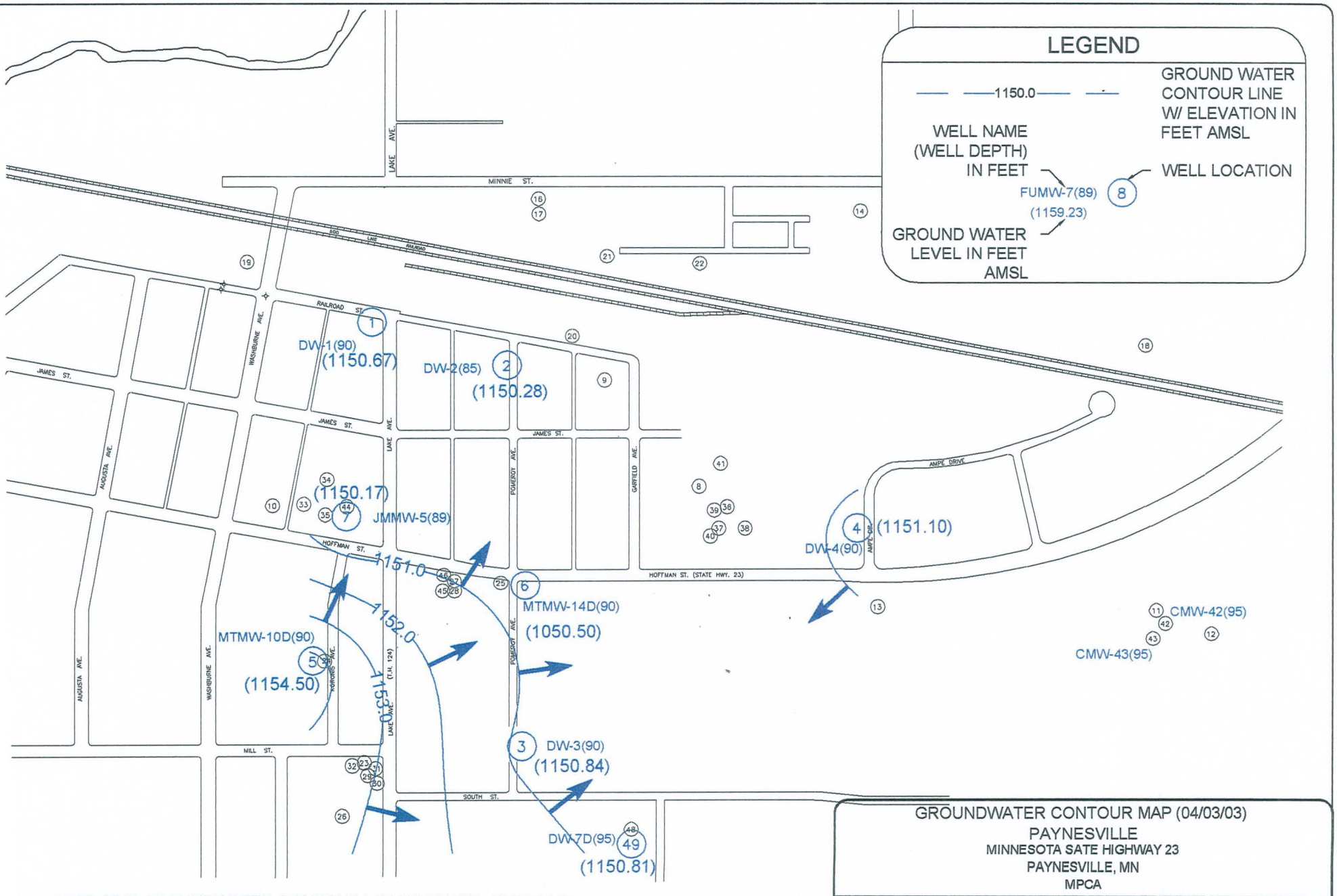


NOTE: THE GROUNDWATER CONTOURS ILLUSTRATED ARE BASED UPON INTERPOLATIONS OF WATER LEVEL DATA OBTAINED FROM WELLS ON 08/19/02. GROUNDWATER ELEVATION DATA COLLECTED FROM WELLS CMW-42 & CMW-43 WERE NOT USED IN THE PREPARATION OF THIS MAP. ACTUAL CONDITIONS MAY VARY.

AGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

GROUNDWATER CONTOUR MAP (8/19/02)
PAYNESVILLE
MINNESOTA STATE HIGHWAY 23
PAYNESVILLE, MN
MPCA

Project Mngr:	WJB	Terracon	Project No.	41987018
Designed By:	WJB		Scale:	AS SHOWN
Checked By:	WJB	3535 Hoffman Road East White Bear Lake, MN 55110	Date:	05/09/03
Approved By:	PJW		Drawn By:	CDR (41)
File Name:	41987018revgw.dwg	Layout1	Figure No.	3A



NOTE: THE GROUNDWATER CONTOURS ILLUSTRATED ARE BASED UPON INTERPOLATIONS OF WATER LEVEL DATA OBTAINED FROM WELLS ON 04/03/03. GROUNDWATER ELEVATION DATA COLLECTED FROM WELLS CMW-42 & CMW-43 WERE NOT USED IN THE PREPARATION OF THIS MAP. ACTUAL CONDITIONS MAY VARY.

GRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

GROUNDWATER CONTOUR MAP (04/03/03)
PAYNESVILLE
MINNESOTA SATE HIGHWAY 23
PAYNESVILLE, MN
MPCA

Project Mngr:	PJW	Terracon	Project No.	41987018
Designed By:	WJB	3535 Hoffman Road East White Bear Lake, MN 55110	Scale:	AS SHOWN
Checked By:	PJW		Date:	05/07/03
Approved By:	PJW		Drawn By:	CDR (41)
File Name:	41987018gw.dwg	Layout1	Figure No.	3D

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
	MONITORING WELLS											
1	DW-1	*G	3/5/1998	<1	<1	<1	<3	<5	<5	<1	-	-
1	DW-1		3/25/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
1	DW-1	*G	6/13/1998	<1	<1	<1	<3	-	<5	<1	-	-
1	DW-1		6/13/1998	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
2	DW-2	G	3/6/1998	<1	<1	<1	<3	<5	<5	**20**	-	-
2	DW-2		3/25/1998	<0.30	<0.30	<0.50	<0.80	<1.0	<0.40	<0.50	-	-
2	DW-2	G	6/13/1998	<1	<1	<1	<3	-	<5	<1	-	-
2	DW-2		6/13/1998	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
3	DW-3	G	3/16/1998	<1	<1	<1	<3	<5	<5	<1	-	-
3	DW-3		3/25/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
3	DW-3	G	6/13/1998	<1	<1	<1	<3	-	<5	<1	-	-
3	DW-3		6/13/1998	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
3	DW-3		9/22/1999	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		12/9/1999	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		4/20/2000	<1.0	**2.2**	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		7/27/2000	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		10/20/2000	**4.9**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		1/16/2001	<1.0	**4.4**	<1.0	**3.0**	<5.0	-	-	<100	-
3	DW-3	2	4/12/2001	<1.0	**6.1**	<1.0	<3.0	<5.0	-	-	**400**	-
3	DW-3		8/13/2001	**17**	<1.0	<1.0	<3.0	<5.0	<5.0	<5.0	<100	-
3	DW-3		10/9/2001	**25**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/19/2001	**24**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		1/29/2002	**8.8**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		4/16/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		8/19/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/5/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		1/17/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		4/4/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-4	G	3/16/1998	<1	<1	<1	<3	<5	<5	<1	-	-
4	DW-4		3/25/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
4	DW-4	G	6/13/1998	<1	<1	<1	<3	-	<5	<1	-	-
4	DW-4		6/13/1998	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
46	DW-6	G	8/20/1998	**330**	<100	<100	<300	-	<500	<100	-	-
46	DW-6		4/5/1999	**140**	**3.9**	**29**	**17.4**	-	-	-	**720**	**150**
46	DW-6		6/21/1999	**120**	**2.1**	**25**	**14**	-	-	-	**660**	**100**
46	DW-6		9/22/1999	**99**	**1.4**	**16**	**9.3**	**10**	-	-	**400**	-
46	DW-6		12/9/1999	**64**	**5.3**	**20**	**29**	**20**	-	-	**570**	-
46	DW-6		4/20/2000	**170**	**1.6**	**9.8**	**24**	**13**	-	-	**760**	-
46	DW-6		7/27/2000	**51**	**1.6**	**9.8**	**13**	<5.0	-	-	**260**	-
46	DW-6		10/20/2000	**40**	<1.0	**10**	**7.3**	**6.2**	-	-	**370**	-
46	DW-6		1/16/2001	**93**	**1.5**	**5.0**	**17**	**5.1**	-	-	**420**	-
46	DW-6		4/12/2001	**86**	<1.0	**2.8**	**15**	**7.7**	-	-	**290**	-
46	DW-6		8/13/2001	**110**	<1.0	**3.2**	**16**	**6.6**	-	-	**300**	-
46	DW-6		10/9/2001	**50**	<1.0	**3.5**	**4.2**	<5.0	-	-	**180**	-
46	DW-6		1/29/2002	**120**	**1.1**	**7.0**	**21**	**5.6**	-	-	**340**	-
46	DW-6		4/16/2002	**93**	<1.0	**4.7**	**19**	**5.8**	-	-	**290**	-

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PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
46	DW-6		8/19/2002	**160**	**1.1**	**2.7**	**16**	**5.1**	-	-	**360**	-
46	DW-6		11/5/2002	**130**	<1.0	**2.1**	**17**	<5.0	-	-	**290**	-
46	DW-6		1/17/2003	**76**	<1.0	**2.4**	**7.8**	<5.0	-	-	**180**	-
46	DW-6		4/4/2003	**23**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
48	DW-7S	3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
48	DW-7S		10/9/2001	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		1/29/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		4/16/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		11/5/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		4/3/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
49	DW-7D	3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
49	DW-7D		10/9/2001	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		1/29/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		4/16/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		11/5/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		4/3/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
21	BEI-MW-2		3/25/1998	<0.30	**0.61**	<0.50	<1.2	<1.0	<0.40	<0.50	-	**170**
27	MW-16		4/5/1999	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		6/21/1999	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		10/6/1999	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		12/9/1999	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
27	MW-16		4/20/2000	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		3/22/2001	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		6/26/2001	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		9/28/2001	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		3/12/2002	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17	G	6/13/1998	**2,100**	<100	<100	<300	-	<500	**140**	-	-
28	MW-17		4/5/1999	**360**	<2.0	<2.0	<6.0	-	-	-	**540**	<100
28	MW-17		6/21/1999	**35**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		10/6/1999	**2.8**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		12/9/1999	**9.2**	**1.7**	**1.2**	**5.8**	<5.0	-	-	<100	-
28	MW-17		4/20/2000	**2.9**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		3/22/2001	**2.1**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		6/26/2001	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		9/28/2001	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		3/12/2002	**2.5**	<1.0	<1.0	<3.0	-	-	-	<50	<100
	POTABLE WELLS											
9	CW-3		3/25/1998	**18**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		5/20/1998	**11**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3	G	6/10/1998	**9.3**	<1	<1	<3	-	<5	<1	-	-
9	CW-3		6/10/1998	**7.5**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
9	CW-3		8/20/1998	**6.2**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		9/9/1998	**5.2**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
9	CW-3		10/5/1998	**4.8**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		11/18/1998	**3.4**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		12/15/1998	**2.9**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		1/25/1999	**1.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		2/18/1999	**1.3**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		3/17/1999	**0.86**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		4/22/1999	**0.63**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		5/21/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		6/24/1999	**0.37**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		7/19/1999	**0.48**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		8/23/1999	**1.4**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		9/22/1999	**1.1**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		10/25/1999	**0.59**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		11/24/1999	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		12/9/1999	**0.36**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		1/13/2000	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
9	CW-3		2/17/2000	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		3/13/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		4/20/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		5/23/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		6/17/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		7/27/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		8/16/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		9/12/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		10/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
9	CW-3		4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	8/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	11/5/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	4/3/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		12/19/1990	**2.2**	<0.2	<0.2	**0.4**	<0.2	<0.5	**0.3**	-	-
10	CW-4		10/23/1997	**16**	<0.30	<0.50	<1.2	<1.0	<0.40	**1.5**	-	-
10	CW-4		3/25/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4	G	6/10/1998	**3.0**	<1	<1	<3	-	<5	**2.2**	-	-
10	CW-4		6/10/1998	**2.9**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.1**	-	-
10	CW-4	G	6/13/1998	**3.5**	<1	<1	<3	-	<5	**2.7**	-	-
10	CW-4		8/20/1998	**6.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
10	CW-4		9/9/1998	**8.8**	<0.3	<0.5	<1.2	<1.0	<0.4	**0.78**	-	-
10	CW-4		10/5/1998	**12**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
10	CW-4		11/18/1998	**19**	<0.3	<0.5	<1.2	<1.0	<0.4	**0.6**	-	-
10	CW-4		12/15/1998	**18**	**0.4**	<0.5	<1.2	<1.0	<0.4	**0.8**	-	-
10	CW-4		1/25/1999	**20**	**0.38**	**0.51**	<1.2	<1.0	<0.4	**1.1**	-	-
10	CW-4		2/18/1999	**19**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
10	CW-4		3/17/1999	**19**	<0.3	**0.55**	<1.2	<1.0	<0.4	**0.88**	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
10	CW-4		4/22/1999	**12**	<0.3	<0.50	<1.2	<1.0	<0.4	**0.51**	-	-
10	CW-4		5/21/1999	**8.8**	<0.3	<0.50	<1.2	<1.0	<0.4	**0.62**	-	-
10	CW-4		6/24/1999	**11**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		7/19/1999	**7.7**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		8/23/1999	**7.3**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		9/22/1999	**6.7**	<0.30	<0.50	<1.2	<1.0	<0.40	**0.59**	-	-
10	CW-4		10/25/1999	**6.6**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		11/24/1999	**5.7**	<0.30	<0.50	<1.2	<1.0	<0.40	**0.5**	-	-
10	CW-4		12/9/1999	**4.9**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		1/13/2000	**3.5**	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
10	CW-4		2/17/2000	**3.0**	<0.30	<0.50	<1.2	<1.0	<0.40	**0.72**	-	-
10	CW-4		3/13/2000	**2.4**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4	*	4/20/2000	**1.7**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		5/23/2000	**0.49**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		6/17/2000	**1.0**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		7/27/2000	**0.66**	<0.30	<0.50	<1.2	<1.0	<0.40	**0.67**	-	-
10	CW-4		8/16/2000	**0.56**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		9/12/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		10/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		12/13/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
10	CW-4		2/15/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	**0.55**	-	-
10	CW-4		3/8/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		6/22/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	7/30/2001	**0.38 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	9/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	**0.75**	-	-
10	CW-4		10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	**0.78**	**0.77**	-	-
10	CW-4	3	11/19/2001	**0.17 J**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.37 J**	-	-
10	CW-4	3	12/3/2001	**0.11 J**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.37 J**	-	-
10	CW-4	3	1/29/2002	**1.3**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.31 J**	-	-
10	CW-4	3	2/8/2002	**1.8**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.37 J**	-	-
10	CW-4	3	3/19/2002	**2.8**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	5/23/2002	**4.2**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.62**	-	-
10	CW-4	3	6/7/2002	**4.9**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.66**	-	-
10	CW-4	3	7/30/2002	**5.7**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	8/19/2002	**6.2**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	9/9/2002	**6.6**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW4		10/11/2002	**8.2**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW4	3	11/5/2002	**7.2**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.70**	-	-
10	CW4	3	12/16/2002	**7.7**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW4	3	1/16/2003	**10**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW4	3	2/6/2003	**11**	<0.50	<0.50	<1.5	<1.0	<0.50	**0.86**	-	-
10	CW4	3	3/6/2003	**13**	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW4	3	4/3/2003	**11**	<1.0	<1.0	<3.0	<1.0	<5.0	**0.089 J**	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
11	CW-5		1/13/2000	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
11	CW-5	3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
11	CW-5	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
12	CW-6		1/13/2000	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
12	CW-6	3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
12	CW-6	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-7	3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-7	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-8	3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-8	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	PACKER TEST											
	CW-4 (70-80')	1	9/23/2002	**5.3**	**6.6**	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (80-90')		9/23/2002	**5.5**	**7.9**	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (90-100')		9/23/2002	**6.4**	**8.9**	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (100-110')		9/23/2002	**8.2**	**6.8**	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-Influent		3/25/1998	**5.8**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent	G	4/23/1998	**1.0**	<1	<1	<3	<5	<5	<1	-	-
	CW-Influent		6/10/1998	**3.7**	**1.0**	**4.7**	**1.3**	<1.0	<1.0	<1.0	-	-
	CW-Influent		8/20/1998	**0.5**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		10/5/1998	**1.1**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		11/18/1998	**0.34**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		12/15/1998	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		1/25/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		2/18/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		3/17/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		4/22/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		5/21/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		6/24/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		7/19/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		8/23/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		9/22/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		10/25/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		11/24/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		12/9/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		1/13/2000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
	CW-Influent		2/17/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		3/13/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		4/20/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		5/23/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		6/17/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent	1	7/27/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		8/16/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		9/12/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		10/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
	CW-Influent		11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		12/13/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-Influent	1	2/15/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		3/8/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		6/22/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	7/30/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	1, 3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	9/11/2001	**0.31 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	11/19/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	12/3/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	2/8/2002	**0.6**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	3/8/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	5/23/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	6/7/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	7/30/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	8/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	9/9/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	10/11/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	11/5/2002	**0.33 J**	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	12/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	1/16/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	1,3	2/6/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	1,3	3/6/2003	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Influent	3	4/3/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Filtered		3/25/1998	**6.8**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	G	4/23/1998	<1	<1	<1	<3	<5	<5	<1	-	-
	CW-Filtered		6/10/1998	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		8/20/1998	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		10/5/1998	**0.73**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		11/18/1998	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		12/15/1998	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		1/25/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		2/18/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		3/17/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		4/22/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		5/21/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		6/24/1999	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		7/19/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		8/23/1999	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		9/22/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		10/25/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		11/24/1999	**5.80**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
	CW-Filtered		12/9/1999	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		1/13/2000	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
	CW-Filtered		2/17/2000	<0.30	<0.30	<0.50	<1.2	<1.0	2.1**	<0.50	-	-
	CW-Filtered		3/13/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		4/20/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	5/23/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	6/17/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	7/27/2000	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		8/16/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	9/12/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	10/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		12/13/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-Filtered		2/15/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		2/28/2001	**0.2**	<0.2	<0.2	<0.4	<2.0	<0.5	<0.2	-	-
	CW-Filtered		3/8/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		6/22/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3	7/30/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3	9/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	*	10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	*, 3	11/19/2001	<0.50	<0.50	<0.50	<1.5	<1.0	**0.92**	<0.50	-	-
	CW-Filtered	3	12/3/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	*, 3	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	*, 3	2/8/2002	**0.36 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3	3/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3	4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1,3	5/23/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		6/7/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	7/30/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	8/19/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	9/9/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	10/11/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	11/5/2002	**0.24 J**	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	12/16/2002	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	1/16/2003	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	2/6/2003	**0.43 J**	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	3/6/2003	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered	3	4/3/2003	<0.50	<0.50	<.50	<1.5	<1.0	<0.5	<0.50	-	-
	Storm Dis.		3/17/1999	<0.3	**0.86**	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		4/22/1999	**3.0**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	<100	<100
	Storm Dis.		9/22/1999	**1.8**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		12/9/1999	**1.1**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		3/13/2000	**0.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
13	Nusery Well G	2/26/1998	<1	<1	<1	<3	<5	<5	<1	-	-
13	Nusery Well	2/26/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
19	AMPI Well	3/25/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
17	Bus Gar. (south)	3/25/1998	<0.30	**0.35**	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	GW PUMPING TEST AND EXTRACTION										
10	CW-4-1	5/20/1998	<1.0	<1.0	<1.0	<1.0	<5.0	NA	NA	<100	-
10	CW-4-2	5/20/1998	<1.0	<1.0	<1.0	<1.0	<5.0	NA	NA	<100	-
10	CW-4-3	5/20/1998	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4-4	5/20/1998	<1.0	<1.0	<1.0	<1.0	**49**	NA	NA	<100	-
10	CW-4-5	5/21/1998	<1.0	<1.0	<1.0	<1.0	<5.0	NA	NA	<100	-
10	CW-4-6	5/21/1998	**0.41**	<0.30	<0.50	<1.2	<1.0	<0.40	**0.46**	-	-
45	DW-5 G	8/20/1998	**2,200**	**140**	<100	<300	-	<500	**100**	-	-
45	DW-5 - 2 hrs G	8/20/1998	**2,300**	**120**	<100	<300	-	<500	**110**	-	-
45	DW-5 - 2 hrs G*	8/20/1998	**760**	**120**	**73**	**65**	**1.7**	<0.40	**41**	**2700**	-
45	DW-5	12/24/1998	**1,600**	**81**	**64**	**41**	<5.0	-	-	**2,800**	-
45	DW-5	12/30/1998	**1,300**	**47**	**51**	**41**	**44**	-	-	**1,700**	-
45	DW-5	1/25/1999	**600**	**28**	**41**	**41**	**5.4**	-	-	**1,100**	-
45	DW-5	2/18/1999	**400**	**13**	**25**	<5.0	<25	-	-	**550**	-
45	DW-5	3/17/1999	**380**	**13**	**22**	**17**	<5.0	-	-	**610**	-
45	DW-5	4/22/1999	**240**	<1.0	**13**	**18**	<5.0	-	-	**590**	-
45	DW-5 *	5/21/1999	**160**	**8.7**	**14**	**13**	<1.0	-	**5.8**	-	-
45	DW-5	6/24/1999	**170**	**6.2**	**9.9**	**8.9**	<5.0	-	-	**280**	-
45	DW-5	7/19/1999	**170**	**5.7**	**11**	**11**	<5.0	-	-	**300**	-
45	DW-5	8/23/1999	**160**	**6.2**	**12**	**8.9**	**5.3**	-	-	**280**	-
45	DW-5	9/22/1999	**170**	**5.7**	**11**	**8.6**	<5.0	-	-	**280**	-
45	DW-5	10/25/1999	**160**	**5.6**	**12**	**10**	<5.0	-	-	**260**	-
45	DW-5	11/24/1999	**150**	**5.8**	**11**	**10**	**5.2**	-	-	**250**	-
45	DW-5	12/9/1999	**140**	**5.7**	**12**	**9.7**	<5.0	-	-	**230**	-
45	DW-5	1/13/2000	**140**	**10**	**12**	**15**	<130	-	-	**290**	-
45	DW-5	2/17/2000	**150**	**5.5**	**12**	**11**	<5.0	-	-	**270**	-
45	DW-5	3/13/2000	**140**	**4.3**	**11**	**9**	<5.0	-	-	**220**	-
45	DW-5	4/20/2000	**140**	**8**	**11**	**13**	**6.7**	-	-	**320**	-
45	DW-5	5/23/2000	**96**	**3.6**	**8.2**	**7.8**	<5.0	-	-	**180**	-
45	DW-5	6/17/2000	**150**	**4.9**	**11**	**10**	<5.0	-	-	**270**	-
45	DW-5	7/27/2000	**130**	**4**	**9.2**	**9.8**	<5.0	-	-	**210**	-
45	DW-5	10/20/2000	**57**	**2.1**	**5.5**	**6**	<5.0	-	-	**120**	-
45	DW-5	1/16/2001	**79**	**3.3**	**7.7**	**9.9**	<5.0	-	-	**170**	-
45	DW-5	4/12/2001	**44**	<1.0	**6**	**9.2**	<5.0	-	-	**130**	-
45	DW-5	8/13/2001	**68**	**1.3**	**8**	**9**	<5.0	-	-	**190**	-
45	DW-5	10/9/2001	**81**	**1.9**	**9.7**	**7.9**	<5.0	-	-	**180**	-
45	DW-5	1/29/2002	**7**	<1.0	**1.3**	<3.0	<5.0	-	-	<100	-
45	DW-5	4/16/2002	**98**	**1.6**	**16**	**12**	<5.0	-	-	**260**	-
45	DW-5	11/5/2002	**110**	<1.0	**5.3**	**7.1**	<5.0	-	-	**170**	-
45	DW-5	1/16/2003	**230**	<1.0	**9**	**10**	<5.0	-	-	**310**	-
45	DW-5	4/4/2003	**350**	**1.2**	**20**	**20**	<5.0	-	-	**530**	-
	QA/QC DUPLICATES AND BLANKS										

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
46	DW-6	D	10/20/2000	**43**	<1.0	**9.7**	**7.3**	<5.0	-	-	**340**	-
46	DW-6	D	8/13/2001	**110**	<1.0	**2.8**	**15**	**5.5**	-	-	**310**	-
3	DW-3	D	1/16/2001	<1.0	**3.4**	**1.1**	**3.6**	<5.0	-	-	<100	-
3	DW-3	D	4/12/2001	<1.0	**4.7**	<1.0	<3.0	<5.0	-	-	**490**	-
3	DW-3	D	10/9/2001	**26**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	1/29/2002	**6.6**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	4/16/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	8/19/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	11/5/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	1/17/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3	D	4/4/2003	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Trip Blank	1	10/20/2000	<0.50	**0.58**	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		12/13/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	1	1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		2/15/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		3/8/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	*	4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		6/22/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		7/30/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		9/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	*	10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/19/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	**	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	**1.9**	<0.50	<100	-
	Trip Blank	*	2/8/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		3/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		6/7/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		7/30/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		8/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		9/9/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		9/23/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		10/17/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/5/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		12/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		1/17/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		2/6/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		4/3/2003	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	-
	Method Blank		10/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		11/20/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		12/13/2000	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		1/16/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		2/15/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		3/8/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		4/12/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		5/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-

TABLE 3 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA
TERRACON PROJECT NO. 41987018

ID#	Sample	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)	Naphthalene (µg/L)	1,2-DCA (µg/L)	GRO (µg/L)	DRO (µg/L)
	Method Blank	6/22/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	7/30/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	8/13/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	9/11/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	10/9/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	11/19/2001	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	1/29/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	2/8/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	3/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	4/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	5/23/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	6/7/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	7/30/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	8/19/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	9/9/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	9/23/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	10/17/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	11/5/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank	12/16/2002	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	1/17/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	2/6/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	3/6/2003	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	Method Blank	4/3/2003	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Pump Blank	11/19/2001	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank	11/5/2002	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank	1/17/2003	<1.0	**1.2**	<1.0	<3.0	<5.0	-	-	<100	-
	HRL / *HBV*	-	10	1,000	700	10,000	*70*	300	4	*200*	*200*
	MCL	-	5	1,000	700	10,000	NE	NE	5	NE	NE
	NPDES	-	114	253	-	166	-	-	190	500	-

Note: Concentrations are in micrograms per liter (µg/L) which is equivalent to parts per billion.
[1] = non-petroleum VOC detected
[2] = large unidentifed peak present in DW-3 and Dup GRO (tentative ID 2-ethyl-1-hexanol)
[3] = Benzene and 1,2-DCA were not detected between the MDL and PQL unless J Flagged
HRL = Health Risk Limit / *Health Based Values* (MDH)
MCL = Maximum contaminant levels (EPA, 1996)
G = Samples analyzed using GC in Geoprobe Sampling Vehicle.
* = Other petroleum related volatile organic compounds detected.

1,2-DCA = 1,2-Dichloroethane
GRO = Gasoline Range Organics
DRO = Diesel Range Organics
** = Concentration due to sample carry over.
NA = not analyzed
D = Duplicate
< = Less than the laboratory reporting limits.

N:\98\98_7018\[018_CHEM.xls]WELLS #######