Annual Monitoring Report – 2010/2011

Paynesville Municipal Water Supply /

Former Midtown Service Station

400 Lake Avenue South

Paynesville, Minnesota 56362

MPCA Site ID #: LEAK0002181 and 131

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Terracon Project No. 41987018

Prepared for:

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Geotechnical Environmental Construction Materials Facilities

from soil-gas probes VP-12 and VP-13 are discussed in Terracon's *Annual Monitoring Report* dated June 30, 2007.

Various petroleum-related volatile organic compounds (VOCs) have been detected in the soil-gas samples collected from the soil-gas probes advanced at the site. Soil-gas probes VP-7 through VP-10, VP-12, and VP-13 were completed near residences. In these and other soil-gas samples, one or more petroleum related VOCs were detected at concentrations that exceeded one of the MPCA residential Intrusion Screening Values (ISVs) (Tables 20A through 20C). Various petroleum-related VOCs were detected in the air samples and soil-gas samples collected from the crawl space under the on-site residence, and sub-slab soil-gas samples collected from the three residences located near the site during 2007/2008. However, the petroleum-related VOC concentrations detected in the air and soil-gas samples collected from the crawl space, soil-gas probes, and sub-slab monitoring points do not exceed 10 times the MPCA residential ISVs established in February 2009, indicating the residences should not be at risk of vapor intrusion. The results from crawl space and sub-slab soil-gas sampling activities are discussed in Terracon's *Annual Monitoring Report – 2007/2008* dated June 12, 2008 and Terracon's *Annual Monitoring Report – 2008/2009* dated May 13, 2009.

Terracon completed a review of the MPCA file for the former Midtown Service Station (LEAK00002181) in order to develop a limited focused feasibility study (FFS). The results of the FFS were submitted to the MPCA in Terracon's *Focused Feasibility Study* dated March 15, 2006. The FFS included a summary of the historic activities on-site and assessment of the effectiveness of corrective actions that have previously targeted the source area at the site. The FFS also included recommendations for further definition of the source area to be remediated, proposed a plan for developing cleanup objectives for the site, and provided a summary of potential corrective actions. Corrective action alternatives evaluated in the FFS included: free product recovery, soil excavation, bioslurping (multi-phase extraction), and in-situ soil flushing. The FFS did not include a recommendation for implementing a specific corrective action to address the current extent and magnitude of the petroleum impacts in and near the source area.

During February and March 2007, 62 laser-induced fluorescence (LIF) probes (LIF-1 through LIF-58, LIF-60, and LIF-61) and 13 soil probes (P-38 through P-50) confirming LIF probes were advanced in and surrounding the former Midtown Service Station to assess the horizontal and vertical extent of LNAPL in soil pore spaces within the source area (Figures 2A and 2B). The goal of the source area assessment was to develop a sufficient understanding of the source area hydrogeology, extent and magnitude of LNAPL, migration pathways, and contaminant fate and transport mechanisms such that a Conceptual Corrective Action Design (CCAD) could be developed to address the risk to identified receptors. The results of the source area assessment activities indicated that in and near the source area the subsurface generally consists of 7- to as much as 17-feet

of fine to coarse grained sand with gravel and fill overlying a till unit composed of clay, sandy clay and clayey sand to 17- to 24-feet below ground surface (bgs). The clay unit overlies a water bearing coarse grained alluvium unit consisting of fine to coarse grained sand that grades to gravel in some areas. The coarse grained alluvium unit extends to 27- to 31-feet bgs and is underlain by a silt to sandy silt unit that extend to at least 40-feet bgs. Perched water is occasionally encountered within the upper sand/fill unit and in sand lenses within the clay unit. The water table was encountered within the source area and down-gradient at approximately 15- to 20-feet bgs. Data from the LIF probes indicated that the LNAPL migrated laterally on top of the fine grained alluvium unit as well as downward to the water bearing coarse grained alluvium unit. The LNAPL also migrated laterally in the water bearing coarse grained alluvium unit. The estimated horizontal extent of LNAPL was approximately within a 160-foot radius of the former tank basins. The interpreted depth to the top of the LNAPL ranged from 5-feet to 24-feet bgs. The interpreted depth to the bottom of the LNAPL was generally near 25-feet bgs, but ranged from approximately 6- to 26-feet. Several areas were identified which required additional assessment to delineate the horizontal extent of the LNAPL and better understand the vertical extent of LNAPL. Monitoring wells DW-8 and DW-9 were installed during May 2007 to better delineate the dissolved phase petroleum plume northeast of the source area. Monitoring well DW-8 was completed in the drinking water aquifer approximately 90-feet bgs. Monitoring well DW-9 was completed in what appears to be the top of the drinking water aquifer, approximately 30-feet bgs. The results of the source area assessment activities are summarized in Terracon's *Annual Monitoring Report* dated June 30, 2007.

During January 2008, additional source area assessment activities were conducted, including advancing 23 additional LIF probes (LIF-62 through LIF-84) and five additional soil probes (P-51 through P-55) to confirm previous LIF data. The goal of the source area assessment was to develop a sufficient understanding of the source area hydrogeology, extent and magnitude of LNAPL, migration pathways, and contaminant fate and transport mechanisms such that a Detailed Corrective Action Design (DCAD) could be developed to address the risk to identified receptors. The additional source area assessment activities included: additional assessment along the north, west and east edge of the proposed area for soil excavation; and further delineation of the horizontal extent along the northeast, northwest, southwest and southeast edges assessed during March 2007.

Based on interpretation of LIF data, the inferred horizontal extent of LNAPL consists of an approximately 320-feet by 200-feet oval shape with LNAPL extending approximately 200-feet northwest of the former tank basins. The interpreted depth to the top of the LNAPL ranges from 7.5-feet to 24-feet bgs. The interpreted depth to the bottom of the LNAPL is generally near 25-feet bgs, but ranges from approximately 12.5- to 27-feet. The interpreted LNAPL thickness is as much as 18.5 feet. Data from the LIF probes

indicated that the LNAPL migrated laterally on top of the fine grained alluvium unit as well as downward to the water bearing coarse grained alluvium unit. The LNAPL also migrated laterally in the water bearing coarse grained alluvium unit. The results of the additional source area assessment activities are summarized in Terracon's *Annual Monitoring Report -2007/2008* dated June 12, 2008.

Monitoring well DW-8S was installed during December 2008 to provide a fixed monitoring point near the top of the drinking water aquifer at the location of monitoring well DW-8 where benzene has consistently been detected at a depth of 85- to 90-feet bgs. The results of the additional assessment and groundwater monitoring activities during 2008/2009 are summarized in Terracon's *Annual Monitoring Report - 2008/2009* dated May 13, 2009. A DCAD recommending the excavation and off-site disposal of the LNAPL impacted soil was also prepared during 2009. The DCAD included options for a large excavation which would likely require access to the residential property north of the site and a small excavation limited to the site that would include a rainey well and associated remedial equipment to attempt to recover the off-site LNAPL. The two source area remedial options are summarized in Terracon's *Detailed Corrective Action Design* dated May 13, 2009. More recently the MPCA is considering the use of mechanical remedial methods to recover the LNAPL such that the costs and potential effectiveness of the various remedial options can be compared. The results of a dual-phase extraction (DPE) pilot test performed during April 2011 will be summarized in a Pilot Test Report scheduled to be complete during June 2011.

Recently Performed Activities

Work performed on the project since the last report has included the following:

- Effluent samples were collected from City Well CW-4 during June 2010, September 2010 and March 2011 as part of operation/monitoring activities associated with City Well CW-4.
- Fluid levels were collected from select monitoring wells and piezometer PZ-1 during October/November 2010 and March 2011.
- Groundwater samples were collected from select monitoring wells, City Wells and the water treatment plan during October/November 2010 and March 2011.
- Remedial well RW-1 and monitoring wells MW-20, MW-21, MW-22, MW-23, MW-24, and MW-25 were abandoned during October 2010 in preparation of DPE pilot test.
- Five new monitoring wells (MW-26 through MW-30), two DPE wells (DPE-1 and DPE-2) and three vapor monitoring points (VMP-1 through VMP-3) were installed during October/November 2011 in preparation for a DPE pilot test.

1.2 If additional work requested in the most recent MPCA correspondence has not been completed, explain why.

The following activities associated with the operation/maintenance of City Well CW-4 and groundwater monitoring activities were not performed:

- **An effluent sample was not collected from City Well CW-4 during the fourth quarter of 2010 as the sample was planned to be collected in conjunction with DPE pilot testing activities which were postponed until April 2011.**
- **Fluid levels were not collected from piezometer PZ-1 during June 2010 and September 2010 because of oversights.**

Section 2: Monitoring Results

2.1 Ground Water

Discuss the cumulative ground water monitoring results, water level measurements, and plume characteristics with respect to identified receptors.

Hydrogeologic Conditions

Depth to groundwater measurements were conducted at the following wells on a semi-annual basis during this reporting period (Figure 2A).

Well ID	Map ID	Well ID	Map ID
DW-1	1	Midtown wells	
DW-2	2	MW-1	23
DW-3R	3	MW-10	24
DW-4	4	MW-10D	5
DW-5	45	MW-14	25
DW-6	46	MW-14D	6
DW-7S	48	MW-15	27
DW-7D	49	MW-17	28
DW-8S	57	MW-18	29
DW-8	55	MW-19	30
DW-9	56	MW-26	-
MW-4	44	MW-27	-
MW-5	7	MW-28	-
MW-16	27	MW-29	-
PZ-1	58	MW-30	-
		DPE-1	-
		DPE-2	-
City of Paynesville monitoring wells			
CMW-42	42		
CMW-43	43		

Well construction information is summarized in Tables 9A and 9B. The groundwater level data is presented in Table 10. The fluid level data from wells screened within the drinking water aquifer between 75- and 95-feet below ground surface were used to prepare the groundwater contour maps depicted in Figures 3A and 3B. The groundwater contour maps developed using groundwater elevation data collected on October28, 2010 and March 1 and 3, 2011 indicate the local horizontal groundwater flow

direction in the drinking water aquifer is generally to the east-southeast which is consistent with previous collected data and the reported regional groundwater flow direction. Historical groundwater elevation data from water table monitoring wells in Paynesville indicate the local horizontal groundwater flow direction in the water table aquifer near the source area is to the north, towards the North Fork of the Crow River. However, local fluctuations and variations due to seasonal infiltration/exfiltration, geologic formations, groundwater pump-out, and/or other site features can affect the groundwater flow. Fluid level data from select monitoring wells screened within the drinking water aquifer are depicted on the hydrograph in Figure 4A, illustrating seasonal fluctuations in groundwater elevations. Fluid level data from select monitoring wells screened within the drinking water aquifer located near recovery well DW-5 are depicted on the hydrograph in Figure 4B. Figure 4B illustrates seasonal fluctuations in groundwater elevations and in the case of wells CMW-42 and DW-5, the effect of groundwater pumping activities from City Wells CW-5 and CW-4, and well DW-5. Fluid level data from deep monitoring wells screened from 80- to 100-feet bgs within the drinking water aquifer are depicted on the hydrographs in Figures 4C and 4D. The hydrograph in Figure 4C illustrates seasonal fluctuations in groundwater elevations and the effect that pumping activities at City Wells CW-5 and CW-6 have on fluid levels in wells CMW-42 and CMW-43. The hydrograph in Figure 4D illustrates seasonal fluctuations in groundwater elevations and indicates that there is insufficient fluid level data from piezometer PZ-1 and other monitoring wells near City Well CW-4 to ascertain the effect of plume containment pumping activities at the City Well.

Groundwater Sampling

The following table summarizes the groundwater monitoring/sampling schedule for the monitoring wells and water supply system.

Location	Analysis	Quarterly	Semi-Annual	Annual
WTP Influent	VOCs		*	
WTP Effluent	VOCs		*	
CW-3	VOCs			*
CW-4	VOCs	*		
CW-5	VOCs			*
CW-6	VOCs			*
CW-7	VOCs			*
CW-8	VOCs			*
DW-3R	BTEX/MTBE/GRO		*	
DW-5	BTEX/MTBE/GRO		*	
DW-6	BTEX/MTBE/GRO		*	
DW-7S	BTEX/MTBE/GRO		*	
DW-7D	BTEX/MTBE/GRO		*	
DW-8	BTEX/MTBE/GRO		*	
DW-8S	BTEX/MTBE/GRO		*	
DW-9	BTEX/MTBE/GRO		*	

Location	Analysis	Quarterly	Semi-Annual	Annual
MW-16	BTEX/MTBE/GRO		*	
MW-17	BTEX/MTBE/GRO		*	
MW-19	BTEX/MTBE/GRO/DRO		*	
MW-26	BTEX/MTBE/GRO/DRO		*	
MW-27	BTEX/MTBE/GRO/DRO		*	
MW-28	BTEX/MTBE/GRO/DRO		*	
MW-29	BTEX/MTBE/GRO/DRO		*	
MW-30	BTEX/MTBE/GRO/DRO		*	

Groundwater samples were collected from the City Wells via sampling taps following purging. Groundwater samples were collected from the monitoring wells after purging three well volumes using disposable bailers or a submersible electric sampling pump with dedicated polyethylene tubing as described in the attached sampling forms. The laboratory results from groundwater samples collected from the monitoring wells and water supply wells are summarized in Tables 11 and 12. Natural attenuation monitoring parameters are summarized in Table 13. Benzene concentrations from select sampling points are plotted versus time in Figures 5A through 5D. Benzene concentrations from monitoring wells completed in the drinking water aquifer and water supply wells and the inferred extent of the dissolved phase benzene plume are shown of Figures 7A and 7B. Copies of laboratory reports are included in Appendix A, sampling methods are described in Appendix B, and the sampling information forms are included in Appendix D.

Annual groundwater samples were collected from City Wells CW-3, and CW-5 through CW-8 during October 2010. The laboratory analytical results for the groundwater samples collected from these monitoring locations indicate that the target VOCs were not detected at concentrations at or above the laboratory reporting limits. Semi-annual groundwater samples were collected from monitoring wells DW-3R, DW-5, DW-6, DW-7S, DW-7D, DW-8S, DW-8, DW-9, MW-16, MW-17, MW-19, MW-27, MW-28, MW-29, MW-30; City Well CW-4; and the Water Treatment Plant (WTP) influent and effluent during October 2010 and March 2011. The laboratory analytical results for the groundwater samples from monitoring wells DW-3R, DW-7S, DW-7D, MW-16, and MW-17 indicate that the benzene, toluene, ethyl benzene, xylenes (BTEX) and gasoline range organics (GRO) were not detected at concentrations at or above the laboratory reporting limits. Concentrations of various petroleum related compounds were detected in the groundwater samples collected from monitoring wells DW-5, DW-6, DW-8, DW-9, MW-19, and MW-26 through MW-30 (Table 11). The benzene concentrations in the groundwater samples collected from monitoring wells DW-5, DW-6, DW-8, MW-19, MW-26, MW-27, and MW-30 during each sampling event exceeded the MDH HRL of 2 µg/L. The benzene concentrations in the groundwater samples collected from monitoring wells DW-9 and MW-28 during the October 2010 sampling event exceeded the MDH HRL of 2 µg/L. The GRO concentrations in the groundwater samples

collected from monitoring wells DW-9, MW-19, and MW-26 through MW-30 exceeded the MDH HBV of 200 µg/L. The diesel range organics (DRO) concentrations in the groundwater samples collected from monitoring wells MW-19, and MW-26 through MW-30 exceeded the MDH HBV of 200 µg/L.

Plume Containment Activities (CW-4)

City Well CW-4 is continually pumped to contain the dissolved phase petroleum plume. Water from the well is discharged to the City of Paynesville storm sewer without needing treatment under a National Pollutant Discharge Elimination System (NPDES) Permit. Groundwater samples are collected from the discharge from City Well CW-4 on a quarterly basis for laboratory analysis as required in the NPDES Permit (Table 11). The groundwater samples were analyzed for the MDH list of VOCs. The target VOCs were not detected in the discharge samples collected during June 2010, September 2010 or March 2011, with the exception of benzene at a concentration of 0.74 µg/L in the sample collected in March 2011. The groundwater analytical results are summarized in Tables 11 and 12. The laboratory reports are included in Appendix A. The sampling information forms are included in Appendix D.

The operational and maintenance history for City Well CW-4 is summarized in Table 21. Significant maintenance activities associated with City Well CW-4 are summarized below.

- The groundwater pumping rate for City Well CW-4 was observed to be decreasing during the summer of 2005 from approximately 103 gallons per minute (gpm) until it was shutdown on August 31, 2005 to replace the RPZ backflow preventer on the well that had failed. The pump was restarted on September 14, 2005 and the maximum pumping rate was approximately 90 gpm.
- The pump in City Well CW-4 failed during March 2006. A new pump was installed in City Well CW-4 on May 5, 2006, but it had the wrong voltage motor. The pump was reinstalled in City Well CW-4 on June 1, 2006 and started the next day. The pumping rate was set to approximately 90 gpm. The pump installed in the well during May/June 2006 can operate at lower pumping rates than the previous pump.
- Water coming from City Well CW-4 was observed to be steaming when the sampling point was opened on May 20, 2008. The well was shutdown for investigation after it was allowed to pump at approximately 25 gpm for approximately one hour before the sample was collected. Further investigation by the City of Paynesville found the discharge line between the well and storm sewer was apparently blocked at a valve or the valve had somehow become closed. The pump would not restart. Thein Well Company (Thein) was contracted to remove and inspect the well pump to determine if it could be repaired or needed to be replaced. Thein found the pump and motor to be in good condition, but there was a hole in the drop pipe which apparently caused the

pump to circulate water within the well until it overheated. The drop pipe and fittings were replaced and the pump was reinstalled and restarted by Thein on June 27, 2008.

- **The flow rate of water being pumped from City Well CW-4 was observed to be 20 gpm on March 31, 2010 and the pump was shut down for service. Thein removed the drop pipe and submersible pump on April 8, 2010 and found the drop pipe near the pump had holes and pump should be replaced. Thein also indicated that the well spool was in poor condition and would likely need to be replaced within the next two years. Thein installed a new pump and drop pipe on May 11, 2010 and the pumping rate was set at approximately 100 gpm.**

The groundwater pumping rate during the current reporting period from May 2010 to March 2011 varied from approximately 80 to 95 gpm. Groundwater analytical data from monitoring wells completed within the drinking water aquifer suggests that a pumping rate of approximately 100 appears to control dissolved phase petroleum plume migration in the direction of City Wells CW-3, CW-5, CW-6, and CW-7. The groundwater pumping rate of City Well CW-4 should be limited so that it does not promote excessive migration of the contaminant plume to the north or downward into the drinking water aquifer.

2.2 **Field-Detectable Vapors** (photoionization detector, explosimeter, etc.)
Discuss the results of any additional follow-up field vapor monitoring. Include a description of each vapor monitoring location and an explanation of monitoring methods and instruments used. Interpret the cumulative results as related to the identified receptors.
Not Applicable

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).

2.3 **Vapor Intrusion** (soil gas, sub-slab, indoor, ambient)
Discuss the results of any follow-up vapor intrusion assessment (VIA) activities including a description of each VIA sampling location and an interpretation of the results with respect to receptors.
Not Applicable

2.4 **Free Product**
If free product is present, discuss what activities are being completed to measure and recover it. Describe the effectiveness of the recovery efforts and free product trends over the course of the investigation. Complete Table 14 and discuss the data compiled to date.

Fluid level data collected during this reporting period detected measurable free product in monitoring wells MW-1, MW-18, MW-26, and MW-30 (Table 10). Product recovery at monitoring wells MW-1 and MW-18 was completed using a bailer to remove the product into a product can during the October 2010 and March 2011 sampling events to attempt to reduce the amount of product in the wells prior to the DPE pilot test. Product recovery activities were not performed on monitoring wells MW-26 and MW-30 as product was not detected or a recoverable volume was not present in these monitoring wells during this reporting period. Table 14 has not been prepared because corrective actions currently being evaluated for the site will address the LNAPL.

2.5 **Other** (e.g., surface water, contaminated surface soil, etc.)
Discuss the results of any additional monitoring or subsurface investigation conducted during this reporting period. Identify all monitoring locations on an attached site map by labeling each location. A description of sampling methods, including the instruments used, must be included in Section 6.

<u>Test Well Installation Activities</u>
Terracon coordinated the advancement of ten soil borings, two of which were completed as DPE test wells (DPE-1 and DPE-2), five of which were completed as monitoring wells (MW-26 through MW-30), and three of which were completed as vapor monitoring points (VMP-1 through VMP-3) during October/November 2011 using hollow stem auger (HSA) and dual rotary drilling methods. The test wells and monitoring points were installed in preparation for a DPE pilot test that was performed during April 2011.

The soil borings for DPE wells DPE-1 and DPE-2 were advanced were advanced to 40-feet and 32-feet bgs respectively. A silt or sandy silt unit was encountered in both borings such that the length of the test wells screens were reduced and the wells were equipped with solid sumps below the screens to attempt to maximize the removal of fluids from lower sand unit. DPE wells DPE-1 and DPE-2 were constructed using 8-inch diameter black steel well casing instrumented with 6- and 9-foot lengths of 8-inch diameter wire wrapped stainless steel well screens, respectively. Each of the DPE wells were equipped with a 5-foot long solid black steel sump below the screened interval The initial attempt to install each of the DPE wells using hollow stem augers were unsuccessful and the well casing and screens were removed, the boreholes redrilled in approximately the same locations using a dual rotary drilling method and the wells reinstalled.

The soil borings for monitoring wells MW-26 through MW-30 were advanced to 30-feet bgs to allow for the completion of monitoring points within the lower sand unit. The monitoring wells were constructed using 10-foot lengths of 2-inch diameter flush threaded Schedule 40 PVC well screens and casing set 29- to 30-feet bgs.

The soil borings for vapor monitoring points VMP-1 through VMP-3 were advanced to 8- to 10-feet bgs to allow for the completion of monitoring point within the sand and fill over the clay unit. The vapor monitoring wells were constructed using 2- to 5-foot lengths of 1-inch diameter flush threaded Schedule 40 PVC well screens and casing. Additional information regarding the well installation activities and the results of the DPE pilot test will be summarized in a separate report.

The results of the well installation activities indicated that the subsurface within the source area consists of 7- to 17-feet of fine to coarse grained sand with gravel and fill overlying a clayey sand till (clay unit) that extends to depths of 17- to 24-feet bgs. The clay unit overlies a water-bearing coarse grained alluvium unit consisting of fine to coarse grained sand that grades to gravel in some areas. The coarse grained alluvium unit extends to 27- to 31-feet bgs and is underlain by a silt to sandy silt unit that extends to at least 40-feet bgs. Perched water is occasionally encountered within the upper sand/fill unit and in sand lenses within the clay unit. The water table was encountered within the source area and down-gradient at approximately 15- to 20-feet bgs. Cross-sections have been developed using the soil boring logs and LIF probe logs for the site (Figures 9A through 9I). The monitoring well construction information is summarized in Table 9B. The soil boring logs, well construction records and MDH logs are included in Appendix C.

Soil Analytical Results

Soil samples collected from the borings were screened in the field for organic vapors using a photo-ionization detector (PID) (Table 2). Elevated organic vapor concentrations were detected in one or more soil samples collected from borings DPE-1, DPE-2, VMP-3, and MW-26 through MW-30. Based upon soil organic vapor concentrations and visual / olfactory evidence the soil drill cuttings were containerized for off-site disposal. The petroleum impacted fluids and well development water was containerized and treated with a potable treatment system prior to being discharged to the storm sewer. The petroleum impacted soil drill cuttings were disposed of by Veolia ES Technical Solutions, LLC.

Select soil samples collected from the soil borings were submitted to a laboratory and analyzed for BTEX, MTBE, GRO and DRO. Elevated concentrations of ethyl benzene, xylenes and GRO were detected in each of the soil samples collected from soil borings (Table 3). Select soil samples from soil borings DPE-1 and DPE-2 were also analyzed for RCRA metals and VOCs plus lead using the Toxic Characterization Leaching Procedure (TCLP) to characterize the soil drill cuttings for off-site disposal (Table 4). Grain size analyses were also performed on select samples collected from soil borings DPE-1 and DPE-2 to size the well screens.

Soil organic vapor readings are summarized in Table 2 and on the boring logs in Appendix C. Laboratory analytical results for soil samples are summarized in Tables 3 and 4. Copies of the laboratory reports are included in Appendix A. Sampling methods are describes in Appendix B. Field data sheets are presented in Appendix D.

2.6 Site Conceptual Model

Discuss any changes to the overall site conceptual model that has altered the current site management decision based upon the information presented in this report.

The results of the source area assessment activities indicated that in and near the source area the subsurface generally consists of 7- to 17-feet of fine to coarse grained sand with gravel and fill overlying a clay to clayey sand till that extends to depths of 17- to 24-feet bgs. The clay unit overlies a water-bearing coarse grained alluvium unit consisting of fine to coarse grained sand that grades to gravel in some areas. The coarse grained alluvium unit extends to 27- to 31-feet bgs and is underlain by a silt to sandy silt unit that extend to at least 40-feet bgs. Perched water is occasionally encountered within the upper sand/fill unit and in sand lenses within the clay unit. The water table was encountered within the source area and down-gradient at approximately 15- to 20-feet bgs. Data from the LIF probes indicated that the LNAPL migrated laterally on top of the clay unit as well as downward to the water bearing coarse grained alluvium unit. The LNAPL also migrated laterally in the water bearing coarse grained alluvium unit. Based on interpretation of LIF data the inferred horizontal extent of LNAPL consists of an approximately 320-feet by 200-feet oval shape with LNAPL extending approximately 200-feet northwest of the former tank basins. The interpreted depth to the top of the LNAPL ranges from 7.5-feet to 24-feet bgs. The interpreted depth to the bottom of the LNAPL is generally near 25-feet bgs, but ranges from approximately 12.5- to 27-feet. The interpreted LNAPL thickness is as much as 18.5 feet.

The LNAPL is the apparent source of a dissolved phase petroleum plume that extends 900-feet to the north-northwest (CW-4) and to the east-northeast (DW-8), and to a depth of at least 90-feet bgs. The occasional presence of benzene (CW-4, DW-3, DW-8) and sometimes 1,2-dichloroethane (CW-4) in groundwater samples from the drinking water aquifer is indicative of the leading edge of the dissolved phase petroleum plume. It is anticipated that the dissolved phase petroleum plume extends to a similar distance and depth to the north and northeast of the source area. City Well CW-4 is being pumped to contain the dissolved phase plume. Impacts to potential vapor receptors have not been identified although a substantial petroleum vapor cloud is present at the site and to the north along Lake Avenue.

Section 3: Site Management Decision

The site management decision should be based on the Program's objectives described in Guidance Document 1-01 *Petroleum Remediation Program General Policy*.

3.1 Recommendation for site:

- ☐ site closure
- ☒ additional ground water monitoring
- ☐ additional field-detectable vapor monitoring
- ☐ additional soil or ground water investigation
- ☐ additional soil gas/vapor intrusion investigation
- ☒ corrective action

3.2 If closure is recommended, summarize significant investigative events and describe how the site-specific exposure pathways identified in the site conceptual model (SCM) have been adequately addressed.

3.3 If additional monitoring or subsurface investigation is recommended, provide details of all proposed activities (e.g., monitoring locations, sampling frequency, target analytes, additional monitoring wells, soil borings). Continue ground water monitoring and sampling in accordance with the previously-approved schedule until the MPCA responds to this report. **The dissolved phase petroleum plume emanating from the former Midtown Service Station continues to impact the water quality in the aquifer at the site and off-site to the north and northeast. In addition, the petroleum impacted groundwater appears to migrate downward into the underlying drinking water aquifer to the north-northwest and east-northeast of the site. The primary source of the dissolved phase petroleum plume appears to be LNAPL which has consistently been observed in monitoring wells MW-1 and MW18 on the former Midtown Service Station property as wells as in many of the LIF probes advanced on the former service station property and adjacent streets and properties. Groundwater quality data indicates the dissolved phase petroleum plume within the drinking water aquifer is responsive to groundwater pumping activities. In comparing data from similar time periods, the City Well CW-4 pumping rates and laboratory analytical data for groundwater samples collected from wells at the site appear to correlate well. During increased groundwater pumping rates at City Well CW-4, dissolved phase petroleum concentrations for samples collected from City Well CW-4 at times increase while those in nearby monitoring wells MW-17 and DW-3/3R have remained below laboratory reporting limits or at concentrations below their respective MDH HRLs or HBVs. However, benzene concentrations in groundwater samples from monitoring wells that appear to be completed near the top of the drinking water aquifer (DW-5, DW-6 and DW-9) typically exceed the MDH HRL indicating that the dissolved phase petroleum plume continues to impact the drinking water aquifer and poses a continuing risk of once again impacting one of the City Wells if pumping**

activities at City Well CW-4 cease. Continued analysis of groundwater 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 plume stability or migration.

Based upon the results of the groundwater monitoring, Terracon recommends that correction actions be taken to address the LNAPL impacted soil in the source area at the site. Ongoing groundwater monitoring activities should continue at the former Midtown Service Station. Terracon recommends the following:

- Prepare a report documenting the results from the DPE pilot test.

- Determine the current status of monitoring wells associated with other sites in Paynesville and determine the ground surface and top of riser elevations for monitoring wells being used for assessment and monitoring activities at the site. Ground surface elevations for select soil boring, soil probes and LIF borings should also be determined.

- Continue groundwater extraction activities utilizing City Well CW-4 to contain the dissolved phase petroleum plume. Continue to adjust the pumping rate of City Well CW-4 to establish an extraction rate that helps prevent excessive migration of the dissolved phase petroleum plume in the direction of either well CW-4 or wells DW-7S, DW-7D, CW-3, CW-5, CW-6 and CW-7. Continue to collect quarterly discharge samples from City Well CW-4 for laboratory analysis. The discharge samples should be analyzed for the MDH list of VOCs per the requirement of the NPDES Permit.

- Collect annual groundwater samples from City Wells CW-3, CW-5, CW-6, CW-7 and CW-8; and semi-annual samples from the water treatment plant influent and effluent. The groundwater samples should be analyzed for the MDH list of VOCs. The sampling schedule should be adjusted to monthly if the dissolved phase petroleum plume appears to become unstable.

- Conduct semi-annual site visits to collect fluid level data from wells DW-1, DW-2, DW-3R, DW-4, DW-5, DW-6, DW-7S, DW-7D, DW-8, DW-8S and DW-9; Midtown wells MW-1, MW-10, MW-10D, MW-14, MW-14D, MW-15, MW-16, MW-17, MW-18, MW-19, MW-26, MW-27, MW-28, MW-29 and MW-30; Johnson Motors wells MW-4 and MW-5; City of Paynesville monitoring wells identified as CMW-42 and CMW-43. Monitoring wells containing measurable free product should not be sampled.

- Collect semi-annual groundwater quality samples for laboratory analysis from monitoring wells DW-3R, DW-5, DW-6, DW-8, DW-8S, DW-9, MW-16, MW-17, MW-19, MW-26, MW-27, MW-28, MW-29 and MW-30; and annual samples

from monitoring wells DW-7S and DW-7D. Well DW-5 should be sampled after purging with the recovery well pump. The samples should be analyzed for BTEX, MTBE, and GRO. A duplicate sample and field blank should be analyzed during each sampling event.

- **The drop pipe and submersible pump should be removed from City Well CW-4 in the summer 2011 and the conditions of the well inspected using a downhole camera. If the pump spool in City Well CW-4 needs to be replaced the City of Paynesville should be contacted to discuss modifying the well to use a pitless adapter which may be less costly than replacing the spool and would allow for the collection of water levels. The MPCA may also wish to consider looking at an alternative means of monitoring the water level in City Well CW-4 such as a pressure transducer.**

- **Perform reporting and project management duties associated with the continued sampling of the municipal water supply and plume containment which includes permitting requirements, utility costs, submission of data to MPCA Staff and the City of Paynesville, and the preparation of an annual monitoring report. The annual report will fulfill the requirements of MPCA Guidance Document 4-08.**

3.4 If additional vapor intrusion investigation is recommended, provide details of proposed activities such as completing an indoor building survey, sub-slab vapor sampling, indoor air sampling, or locations for additional soil gas sampling.
Not Applicable

3.5 If corrective action is recommended, provide a conceptual approach by completing Guidance Document 4-19 *Conceptual Corrective Action Design Worksheet* and include in Section 6. See Guidance Document 4-10 *Elements of the Corrective Action Design* for more information on the corrective action design process and other requirements. (Note: If a *Conceptual Corrective Action Design Worksheet* is submitted, MPCA staff will review this report at a higher-than-normal priority to determine if corrective action is required.)
See Terracon's pending Pilot Test Report.

TABLE 2 - RESULTS OF SOIL HEADSPACE SCREENING (SOURCE AREA)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Terracon

DEPTH	SOIL BORING OR PROBE																									
(ft)	B-1/MW-1	B-2	B-3	B-4	B-5	B-6	B-7	B-8	B-9	B-10	B-11	B-12	B-13	B-14	B-15	DW-3R	DW-6	DW-9	FA-1	FA-2	FA-3	VP-1	VP-2	VP-3	VP-4	VP-5
0-2	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	<1	<1	ND	ND	TR	<1	<4	<1	<1	<1
2-4	1	ND	TR	ND	TR	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	NR	<1	ND	ND	NS	<1	<4	<1	<1	<1
4-6	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	NS	NS	TR	<1	<4	<1	<1	NR
6-8	3	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	<1	<1	ND	350	NS	<1	<4	<1	<1	NR
8-10	260	ND	ND	55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	ND	ND	NS	<1	<4	<1	<1	NR
10-12	300	TR	ND	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	<1	<1	NS	300	10	6426	<4	<1	<1	<1
12-14	260	TR	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	<1	<1	NS	NS	110	1275	<4	<1	<1	<1
14-16	220	80	ND	6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	NS	240	NS	NS	<4	<1	<1	<1
16-18	70	280	ND	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	ND	NS	140	EOB=15 ft	<4	<1	<1	<1
18-20	320	280	ND	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<1	<1	<1	NS	200	NS		<4	16.1	<1	<1
20-22	70	NS	ND	20	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	<1	<1	<1	320	NS	200		<4	EOB=20 ft	EOB=20 ft	EOB=20 ft
22-24	320	NS	ND	2	ND	ND	120	ND	ND	ND	ND	20	ND	ND	ND	<1	<1	<1	300	NS	240		72.4			
24-26	240	60	ND	2	ND	45	30	45	80	EOB=24 ft	EOB=24 ft	15	ND	ND	EOB=24 ft	NS	<1	<1	EOB=24 ft	EOB=25 ft			52.2			
26-28	230	EOB=26.5 f	EOB=26.5 f	EOB=26.5 f	EOB=26.5 f	EOB=26.5 f	EOB=26.5 f	34	170			EOB=26.5 f	ND	ND		NS	<1	<1					EOB=25 ft			
28-30	30							EOB=29 ft	EOB=29 ft				EOB=29 ft	EOB=29 ft		NS	<1	<1								
30-32	3															<1	<1	<1								
32-34	4															NS	<1	EOB=31 ft								
34-36	2															<1	<1									
36-38	ND															NS	<1									
38-40	EOB=40 ft															<1	<1									
																<1 to 90 ft	<1 to 90 ft									
																EOB=90 ft	EOB=90 ft									

DEPTH	SOIL BORING OR PROBE																									
(ft)	VP-6	P-38	P-39	P-40	P-41	P-42	P-43	P-44	P-45	P-46	P-47	P-48	P-49	P-50	P-51	P-52	P-53	P-54	P-55	DW-3R	DW-8	DW-8S	DW-9	PZ-1	VMP-1	VMP-2
0-2	<1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<1	1.6	NR	<1	<1	NS	<1	<1	<1	<1	<1	2.1
2-4	<1	<1	<1	1	<1	1.5	<1	<1	<1	5.9	<1	<1	<1	NS	<1	1.4	NR	<1	<1	NS	NR	<1	<1	<1	<1	3.4
4-6	<1	1.9	<1	<1	<1	1.5	5.2	<1	<1	<1	<1	<1	<1	NS	<1	1.2	NR	<1	<1	<1	<1	NR	<1	<1	NR	3.8
6-8	<1	1	<1	<1	<1	1.1	<1	<1	<1	5.9	<1	<1	<1	NS	NR	<1	<1	<1	<1	NS	<1	NR	<1	<1	1.2	16.6
8-10	<1	1.5	<1	1	1.1	1.1	5.2	<1	<1	<1	<1	<1	<1	NS	<1	<1	<1	<1	<1	<1	<1	NR	<1	<1	248.7	10.7
10-12	<1	NR	2.3	50.9	1.1	<1	<1	<1	<1	<1	<1	<1	<1	NS	1.8	<1	<1	4	<1	NS	<1	NR	<1	<1	EOB = 10 ft	EOB = 10 ft
12-14	<1	16.6	34.5	2420	3.7	1.1	<1	<1	<1	<1	<1	<1	<1	NS	<1	2.4	<1	<1	<1	NS	<1	NR	<1	<1		
14-16	NS	4303	2493	2230	2.4	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	2.2	<1	<1	<1	<1	<1	<1	<1	<1		
16-18	<1	NR	10767	132.9	687	2	<1	<1	<1	<1	<1	<1	<1	NS	3.2	2	<1	NR	<1	<1	<1	NR	<1	<1		
18-20	<1	NR	10974	84.9	1589	<1	<1	<1	<1	<1	<1	<1	<1	NS	<1	1.2	<1	<1	<1	<1	<1	<1	<1	<1		
20-22	EOB=20 ft	NR	9828	81.7	1690	105.6	<1	<1	<1	5.9	<1	<1	<1	NS	1.6	NR	<1	<1	<1	<1	<1	<1	<1	1.3		
22-24		71114	6879	>9999	1663	848	415	<1	<1	29.8	<1	<1	101.8	NA	1.4	1.3	<1	<1	<1	<1	<1	NR	<1	<1		
24-26		>9999	3099	269	1092	1450	2456	19.7	<1	53.7	EOB=24 ft	8395	EOB=24 ft	NA	9.2	1.6	<1	<1	<1	NS	<1	<1	<1	<1		
26-28		52.3	1878	EOB=25 ft	1818	EOB=25 ft	EOB=25 ft	<1	14	5.9		1131		EOB=26 ft	2.1	1.6	<1	<1	<1	NS	<1	<1	<1	1.1		
28-30		63	7.9		1728			<1	54.7	EOB=28 ft		346			1.7	1.4	<1	<1	<1	NS	<1	<1	<1	<1		
30-32		106	6.6		EOB=30 ft			<1	EOB=30 ft			226			EOB=30ft	EOB=30ft	EOB=30ft	EOB=30ft	EOB=30ft	<1	<1	<1	<1	<1		
32-34		4.5	4.5					EOB=32 ft				EOB=32 ft								NS	<1	<1	EOB=31 ft	<1		
34-36		5.3	3.2																	<1	<1	<1		1.2		
36-38		33.2	EOB=35 ft																	NS	<1	EOB=35ft		<1		
38-40		3.6																		<1	<1			<1		
		EOB=40 ft																		<1 to 90 ft	<1 to 90 ft			<1.2 to 90 ft		
																				EOB=90 ft	EOB=90 ft			EOB=110 ft		

Notes:
Organic vapor concentrations measured in parts per million (ppm) using an OVM 580B photoionization detector with a 10.6 eV lamp as referenced to an isobutylene standard.
< = Less than
ND = Not detected (<1 ppm)
NR = No Recovery
NS = Not Sampled
NA = Not Analyzed
EOB = End of Boring

5/2/11

TABLE 2 - RESULTS OF SOIL HEADSPACE SCREENING (SOURCE AREA)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Terracon

DEPTH	SOIL BORING OR PROBE								
(ft)	VMP-1	MW-26	MW-27	MW-28	MW-29	MW-30	DPE-2A	(ft)	DPE-1A
0-2	2.2	969.9	<1	3.9	2.0	2.9	<1	0-1	NS
2-4	NR	7.4	7 1	37.1	2.8	1.4	<1	1-3	4.5
4-6	2.4	437.6	NR	39.0	2 9	2.4	<1	3-5	1.7
6-8	2.1	245.7	1570	NR	1.8	1094	892.2	5-7	1.6
8-10	3.8	NR	1492	1.9	3.2	1088	820.9	7-9	<1
10-12	EOB = 10 ft	274	818.9	10.6	1.6	1433-	396.3	9-11	<1
12-14		316.8	1019	6.9	2.5	1301	992.1	11-13	<1
14-16		353.7	1445	91.7	1.4	659.1	396.4	13-15	<1
16-18		1168	1250	111.2	1.8	940.2	887.5	15-17	<1
18-20		298.7	1020	641.6	921 8	1385	393.8	17-19	910
20-22		283.9	1341	803.8	994.1	957.1	723.8	19-21	157.7
22-24		751 5	1014	689.4	985 3	276.3	278.3	21-23	777.5
24-26		994 6	1188	728	976.5	339.1	910 8	23-25	764.5
26-28		931	1220	142.3	706.2	364.3	290 2	25-27	804.7
28-30		850.5	631.9	37.8	710.7	484.6	131.7	27-29	849.5
30-32		EOB=30 ft	EOB=30 ft	EOB=30 ft	EOB=30 ft	EOB=30 ft	315 4	29-31	271.7
32-34							EOB=32 ft	31-33	398.5
34-36								33-35	229.4
36-38								35-37	174.6
38-40								37-39	293.1
								39-40	279
									EOB=40 ft

Notes

5/2/11

Organic vapor concentrations measured in parts per million (ppm) using an OVM 580B photoionization detector with a 10 6 eV lamp as referenced to an isobutylene standard

< = Less than
NR = No Recovery
NA = Not Analyzed
ND = Not detected (<1 ppm)
NS = Not Sampled
EOB = End of Boring

TABLE 3 - SOIL ANALYTICAL RESULTS
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location		Depth (feet)	Sample Date	Percent Moisture	Benzene	Toluene	Ethylbenzene	Xylenes	Methyl Tert-Butyl Ether	Gasoline Range Organics	Diesel Range Organics	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Lab Type
					mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Soil Probe Samples														
VP-1		12	11/04/04	10.3	**0.71**	**9.7**	**5.6**	**13.0**	<0.89	**826**	-	**87.3**	**25.6**	Fixed
VP-2	T6	24	11/04/04	12.6	**0.062**	<0.057	<0.057	<0.17	<0.23	<5.7	-	**1.7**	**0.86**	Fixed
VP-3	T6	20	11/04/04	5.5	<0.053	<0.053	<0.053	<0.16	<0.21	**7.5**	-	**0.56**	**0.54**	Fixed
VP-4	T6	19	11/04/04	11.1	<0.056	<0.056	<0.056	<0.17	<0.22	<5.6	-	**0.39**	**0.42**	Fixed
VP-5		16	11/04/04	10.6	<0.056	<0.056	<0.056	<0.17	<0.22	<5.6	-	**0.33**	**0.22**	Fixed
VP-6		14	11/04/04	6.3	<0.053	<0.053	<0.053	<0.16	<0.21	<5.3	-	**0.28**	**0.20**	Fixed
P-38	1, 2	22-24	02/20/07	9.9	**2.1**	**11**	**5**	**24.3**	**0.15**	**260**	-	-	-	Fixed
P-38	2	36-38	02/20/07	19.8	**0.097**	<0.031	<0.031	<0.093	<0.031	<3.1	-	-	-	Fixed
P-39	1, 2	18-20	02/21/07	8.6	<0.068	**0.2**	**3.4**	**10.2**	**0.28**	**290**	-	-	-	Fixed
P-40	1, 2	20-21	02/21/07	9.4	<0.055	<0.055	<0.055	**4.5**	<0.055	**210**	-	-	-	Fixed
P-41	1, 2	26-28	02/22/07	7.6	<0.027	<0.027	**0.56**	**1.91**	**0.098**	**160**	-	-	-	Fixed
P-42	1, 2	22-24	02/22/07	15.4	<0.12	<0.12	<0.12	**2.36**	<0.12	**280**	-	-	-	Fixed
P-43	1, 2	24-26	02/22/07	7.3	<0.054	<0.054	**0.45**	**1.29**	**0.095**	**170**	-	-	-	Fixed
P-44		22-24	02/26/07	9.3	<0.028	<0.028	<0.028	<0.083	<0.028	<2.8	-	-	-	Fixed
P-45		26-28	02/26/07	13.1	<0.029	<0.029	**0.045**	**0.075**	<0.029	<2.9	-	-	-	Fixed
P-46		22-24	02/27/07	10.2	<0.028	<0.028	**0.041**	**0.11**	<0.028	<2.8	-	-	-	Fixed
P-47	1	22-24	02/27/07	11.8	<0.028	<0.028	**0.081**	**0.16**	<0.028	**2.9**	-	-	-	Fixed
P-48	1	22-24	02/27/07	11.6	<0.028	<0.028	<0.028	<0.085	<0.028	**4.0**	-	-	-	Fixed
P-49	1	22-24	02/28/07	11.5	**0.13**	**0.067**	**0.15**	**0.66**	<0.028	**4.7**	-	-	-	Fixed
P-51		24-26	01/09/08	13.2	<0.029	<0.029	<0.029	<0.087	<0.029	<2.9	-	-	-	Fixed
P-52		22-24	01/09/08	11.1	<0.028	<0.028	<0.028	<0.084	<0.028	<2.8	-	-	-	Fixed
P-53		28-30	01/10/08	5.9	<0.027	<0.027	<0.027	<0.080	<0.027	<2.7	-	-	-	Fixed
P-54		10-12	01/11/08	8.0	<0.027	<0.027	<0.027	<0.081	<0.027	<2.7	-	-	-	Fixed
P-55		26-28	01/11/08	9.9	<0.028	<0.028	<0.028	<0.083	<0.028	<2.8	-	-	-	Fixed
DW-3R		16-18	04/23/07	9.7	<0.029	<0.029	<0.029	<0.087	<0.029	<2.9	-	-	-	Fixed
DW-8		10-12	04/24/07	13.4	<0.029	<0.029	<0.029	<0.087	<0.029	<2.9	-	-	-	Fixed
DW-9		18-20	04/25/07	12.0	<0.028	<0.028	<0.028	<0.085	<0.028	<2.8	-	-	-	Fixed
DPE-1		16-18	10/05/10	9.9	<0.057	<0.057	**0.54**	**1.6**	<0.29	**107**	**14.2**	-	-	Fixed
DPE-2		24-26	10/06/10	14.1	<0.12	**0.18**	**1.4**	**4.7**	<0.59	**263**	<10.5	-	-	Fixed
MW-26	T7	16-18	10/11/10	9.5	<0.29	**33.5**	**14.4**	**70.9**	<1.4	**980**	**22.2**	-	-	Fixed
MW-27	T7	6-8	10/12/10	9.0	<1.0	**16.2**	**19.7**	**90.5**	<5.2	**1,060**	**47.5**	-	-	Fixed
MW-28		20-22	10/12/10	12.7	<0.11	**0.15**	**0.26**	**0.46**	<0.57	**142**	**128**	-	-	Fixed
MW-29		20-22	10/13/10	12.0	<0.056	<0.056	**0.26**	**1.0**	<0.28	**81.9**	**44.1**	-	-	Fixed
MW-30	T7	10-12	10/13/10	9.3	**2.9**	**25.8**	**15.3**	**81.6**	<2.8	**938**	**80.4**	-	-	Fixed

TABLE 3 - SOIL ANALYTICAL RESULTS
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location	Depth (feet)	Sample Date	Percent Moisture	Benzene	Toluene	Ethylbenzene	Xylenes	Methyl Tert-Butyl Ether	Gasoline Range Organics	Diesel Range Organics	1,2,4-Trimethyl-benzene	1,3,5-Trimethyl-benzene	Lab Type
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
QA/QC Samples													
MeOH Trip Blank	-	02/21/07	-	<0.025	<0.025	<0.025	<0.075	<0.025	<2.5	-	-	-	Fixed
MeOH Trip Blank	-	04/25/07	-	<0.050	<0.050	<0.050	<0.075	<0.050	-	-	<0.050	<0.050	Fixed
MeOH Trip Blank	-	01/09/08	-	<0.025	<0.025	<0.025	<0.075	<0.025	<2.5	-	-	-	Fixed
MeOH Trip Blank	-	10/06/10	-	<0.050	<0.050	<0.050	<0.15	<0.25	<5.0	-	-	-	Fixed
MeOH Trip Blank	-	10/13/10	-	<0.050	<0.050	<0.050	<0.15	<0.25	<5.0	-	-	-	Fixed
Method Blank	-	11/04/04	-	<0.050	<0.050	<0.050	<0.15	<0.20	<5.0	-	<0.050	<0.050	Fixed
Method Blank	-	02/21/07	-	<1.0	<1.0	<1.0	<2	<1.0	<50	-	-	-	Fixed
Method Blank	-	04/25/07	-	<0.025	<0.025	<0.025	<0.050	<0.025	<2.5	-	-	-	Fixed
Method Blank	-	01/09/08		<0.025	<0.025	<0.025	<0.075	<0.025	<2.5	-	-	-	Fixed
Method Blank	-	10/06/10	-	<0.050	<0.050	<0.050	<0.15	<0.25	<5.0	<5.0	-	-	Fixed
Method Blank	-	10/13/10	-	<0.050	<0.050	<0.050	<0.15	<0.25	<5.0	<5.0	-	-	Fixed
SRVs (Tier 1)	-	-	-	1.5	107	200	110	NE	NE		NE	NE	-
SLVs (Tier 1)	-	-	-	0.034	6.4	4.7	45	0.027	NE		NE	NE	-

Note: Soil analytical results reported in milligrams per kilogram (mg/kg), which is the same as parts per million (ppm). Methanol trip blanks reported in mg/L. 5/3/2011

Results at or below the laboratory reporting limits (RLs) are preceded by the less than symbol (<).

Analytes without Tier 1 limits were denoted with NE (Not Established).

Bolded values indicate results were above the laboratory RLs.

1. Early and late eluting peaks were present outside the window of analysis.
2. Analyzed outside holding time

T6 High boiling point hydrocarbons were present in the GRO sample.

T7. Low boiling point hydrocarbons present in the DRO sample.

TABLE 4 - SOIL ANALYTICAL RESULTS - RCRA METALS, TCLP VOC AND METALS
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location	Depth in Feet BGS	Sample Date	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Lead (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Mercury (mg/kg)	Lead (mg/L)	Mercury (mg/L)	Benzene (mg/L)	2-Butanone (MEK) (mg/L)	Carbon Tetrachlorid (mg/L)	Chlorobenzene (mg/L)	Chloroform (mg/L)	1,4-Dichlorobenzen (mg/L)	1,2-Dichloroethane (mg/L)	1,1-Dichloroethene (mg/L)	Tetrachloroethene (mg/L)	Trichloroethene (mg/L)	Vinyl chloride (mg/L)	Lab Type
DPE-1	-	10/06/10	**5.2**	**17.5**	<0.20	**7.7**	<1.2	<3.0	<2.0	-	<0.015	<0.0008	<0.050	<0.200	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	Fixed
DPE-2	-	10/06/10	**7.1**	**22.9**	<0.19	**7.7**	**2.4**	<2.9	<1.9	-	<0.015	<0.0008	**0.0565**	<0.200	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	Fixed
Method Blank	-	10/06/10	<0.050	<0.25	<0.0050	<0.050	<0.015	<0.075	<0.050	-	<0.015	<0.0008	<0.050	<0.200	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.020	Fixed
Regulatory Levels	-	-	-	-	-	-	-	-	-	-	5.0	0.2	0.5	200	0.5	100	6.0	7.5	0.5	0.7	0.7	0.5	0.2	-

Notes:
Soil TCLP concentrations in milligrams per liter (mg/l) which is equal to parts per million (ppm).
< denotes less than laboratory reporting limits (RLs)
Bold indicates values at or above RLs
"-" = Not analyzed or applicable
NE = not established

5/12/11

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
1	DW-1	03/16/98	18.97	-	-	1,170.73	90	1,151.76
1	DW-1	03/25/98	19.37	-	-	1,170.73	90	1,151.36
1	DW-1	04/22/98	17.29	-	-	1,170.73	90	1,153.44
1	DW-1	05/20/98	18.04	-	-	1,170.73	90	1,152.69
1	DW-1	05/21/98	19.30	-	-	1,170.73	90	1,151.43
1	DW-1	06/13/98	18.61	-	-	1,170.73	90	1,152.12
1	DW-1	08/20/98	19.91	-	-	1,170.73	90	1,150.82
1	DW-1	01/25/99	21.08	-	-	1,170.73	90	1,149.65
1	DW-1	02/18/99	21.53	-	-	1,170.73	90	1,149.20
1	DW-1	03/17/99	21.30	-	-	1,170.73	90	1,149.43
1	DW-1	03/18/99	21.28	-	-	1,170.73	90	1,149.45
1	DW-1	04/22/99	19.41	-	-	1,170.73	90	1,151.32
1	DW-1	04/28/99	19.83	-	-	1,170.73	90	1,150.90
1	DW-1	05/21/99	18.74	-	-	1,170.73	90	1,151.99
1	DW-1	07/19/99	19.67	-	-	1,170.73	90	1,151.06
1	DW-1	08/23/99	20.64	-	-	1,170.73	90	1,150.09
1	DW-1	09/22/99	19.44	-	-	1,170.73	90	1,151.29
1	DW-1	10/25/99	21.78	-	-	1,170.73	90	1,148.95
1	DW-1	11/24/99	21.07	-	-	1,170.73	90	1,149.66
1	DW-1	12/09/99	20.98	-	-	1,170.73	90	1,149.75
1	DW-1	01/13/00	20.95	-	-	1,170.73	90	1,149.78
1	DW-1	02/17/00	21.02	-	-	1,170.73	90	1,149.71
1	DW-1	04/20/00	21.07	-	-	1,170.73	90	1,149.66
1	DW-1	05/23/00	20.80	-	-	1,170.73	90	1,149.93
1	DW-1	06/17/00	22.16	-	-	1,170.73	90	1,148.57
1	DW-1	07/27/00	21.03	-	-	1,170.73	90	1,149.70
1	DW-1	08/16/00	21.95	-	-	1,170.73	90	1,148.78
1	DW-1	09/12/00	21.35	-	-	1,170.73	90	1,149.38
1	DW-1	10/20/00	21.67	-	-	1,170.73	90	1,149.06
1	DW-1	12/13/00	22.12	-	-	1,170.73	90	1,148.61
1	DW-1	01/16/01	21.36	-	-	1,170.73	90	1,149.37
1	DW-1	02/15/01	23.37	-	-	1,170.73	90	1,147.36
1	DW-1	03/08/01	22.13	-	-	1,170.73	90	1,148.60
1	DW-1	04/12/01	18.54	-	-	1,170.73	90	1,152.19
1	DW-1	05/11/01	18.33	-	-	1,170.73	90	1,152.40
1	DW-1	06/22/01	19.02	-	-	1,170.73	90	1,151.71
1	DW-1	07/30/01	19.63	-	-	1,170.73	90	1,151.10
1	DW-1	08/13/01	19.92	-	-	1,170.73	90	1,150.81
1	DW-1	09/11/01	20.07	-	-	1,170.73	90	1,150.66
1	DW-1	10/09/01	19.76	-	-	1,170.73	90	1,150.97
1	DW-1	11/19/01	21.17	-	-	1,170.73	90	1,149.56
1	DW-1	12/03/01	20.52	-	-	1,170.73	90	1,150.21
1	DW-1	01/29/02	21.58	-	-	1,170.73	90	1,149.15
1	DW-1	02/08/02	21.97	-	-	1,170.73	90	1,148.76
1	DW-1	03/19/02	22.34	-	-	1,170.73	90	1,148.39
1	DW-1	04/16/02	20.10	-	-	1,170.73	90	1,150.63
1	DW-1	05/23/02	20.17	-	-	1,170.73	90	1,150.56
1	DW-1	06/07/02	19.77	-	-	1,170.73	90	1,150.96
1	DW-1	08/19/02	17.81	-	-	1,170.73	90	1,152.92
1	DW-1	11/05/02	17.46	-	-	1,170.73	90	1,153.27
1	DW-1	01/16/03	18.84	-	-	1,170.73	90	1,151.89
1	DW-1	04/03/03	20.06	-	-	1,170.73	90	1,150.67
1	DW-1	07/24/03	18.74	-	-	1,170.73	90	1,151.99
1	DW-1	10/24/03	19.63	-	-	1,170.73	90	1,151.10
1	DW-1	02/04/04	20.13	-	-	1,170.73	90	1,150.60
1	DW-1	04/07/04	20.07	-	-	1,170.73	90	1,150.66
1	DW-1	08/24/04	19.41	-	-	1,170.73	90	1,151.32
1	DW-1	02/16/05	20.01	-	-	1,170.73	90	1,150.72
1	DW-1	11/02/05	17.19	-	-	1,170.73	90	1,153.54
1	DW-1	05/04/06	15.89	-	-	1,170.73	90	1,154.84
1	DW-1	11/29/06	19.97	-	-	1,170.73	90	1,150.76
1	DW-1	03/20/07	19.30	-	-	1,170.73	90	1,151.43
1	DW-1	09/24/07	19.49	-	-	1,170.73	90	1,151.24
1	DW-1	02/12/08	18.45	-	-	1,170.73	90	1,152.28

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
1	DW-1	11/10/08	18.29	-	-	1,170.73	90	1,152.44
1	DW-1	02/11/09	19.24	-	-	1,170.73	90	1,151.49
1	DW-1	08/11/09	18.45	-	-	1,170.73	90	1,152.28
1	DW-1	02/03/10	17.14	-	-	1,170.73	90	1,153.59
1	DW-1	10/28/10	18.49	-	-	1,170.73	90	1,152.24
1	DW-1	03/01/11	18.97	-	-	1,170.73	90	1,151.76
2	DW-2	03/16/98	17.68	-	-	1,170.44	85	1,152.76
2	DW-2	03/25/98	20.12	-	-	1,170.44	85	1,150.32
2	DW-2	04/22/98	17.30	-	-	1,170.44	85	1,153.14
2	DW-2	05/20/98	18.09	-	-	1,170.44	85	1,152.35
2	DW-2	05/21/98	18.88	-	-	1,170.44	85	1,151.56
2	DW-2	06/13/98	18.64	-	-	1,170.44	85	1,151.80
2	DW-2	08/20/98	19.25	-	-	1,170.44	85	1,151.19
2	DW-2*	12/23/98	20.33	-	-	1,170.44	85	1,150.11
2	DW-2	12/23/98	20.31	-	-	1,170.44	85	1,150.13
2	DW-2	12/30/98	21.03	-	-	1,170.44	85	1,149.41
2	DW-2	01/25/99	20.94	-	-	1,170.44	85	1,149.50
2	DW-2	02/18/99	21.59	-	-	1,170.44	85	1,148.85
2	DW-2	03/17/99	20.92	-	-	1,170.44	85	1,149.52
2	DW-2	03/18/99	21.29	-	-	1,170.44	85	1,149.15
2	DW-2	04/22/99	19.27	-	-	1,170.44	85	1,151.17
2	DW-2	04/28/99	19.93	-	-	1,170.44	85	1,150.51
2	DW-2	05/21/99	18.74	-	-	1,170.44	85	1,151.70
2	DW-2	07/19/99	19.75	-	-	1,170.44	85	1,150.69
2	DW-2	08/23/99	21.17	-	-	1,170.44	85	1,149.27
2	DW-2	09/22/99	19.58	-	-	1,170.44	85	1,150.86
2	DW-2	10/25/99	20.47	-	-	1,170.44	85	1,149.97
2	DW-2	11/24/99	19.85	-	-	1,170.44	85	1,150.59
2	DW-2	12/09/99	20.73	-	-	1,170.44	85	1,149.71
2	DW-2	01/13/00	20.87	-	-	1,170.44	85	1,149.57
2	DW-2	02/17/00	20.97	-	-	1,170.44	85	1,149.47
2	DW-2	04/20/00	21.02	-	-	1,170.44	85	1,149.42
2	DW-2	05/23/00	20.70	-	-	1,170.44	85	1,149.74
2	DW-2	06/17/00	21.74	-	-	1,170.44	85	1,148.70
2	DW-2	07/27/00	21.01	-	-	1,170.44	85	1,149.43
2	DW-2	08/16/00	22.27	-	-	1,170.44	85	1,148.17
2	DW-2	09/12/00	21.29	-	-	1,170.44	85	1,149.15
2	DW-2	10/20/00	21.55	-	-	1,170.44	85	1,148.89
2	DW-2	12/13/00	22.62	-	-	1,170.44	85	1,147.82
2	DW-2	01/16/01	21.32	-	-	1,170.44	85	1,149.12
2	DW-2	02/15/01	23.31	-	-	1,170.44	85	1,147.13
2	DW-2	04/12/01	19.21	-	-	1,170.44	85	1,151.23
2	DW-2	05/11/01	18.76	-	-	1,170.44	85	1,151.68
2	DW-2	06/22/01	19.13	-	-	1,170.44	85	1,151.31
2	DW-2	07/30/01	19.94	-	-	1,170.44	85	1,150.50
2	DW-2	08/13/01	19.78	-	-	1,170.44	85	1,150.66
2	DW-2	09/11/01	20.61	-	-	1,170.44	85	1,149.83
2	DW-2	10/09/01	19.66	-	-	1,170.44	85	1,150.78
2	DW-2	11/19/01	21.48	-	-	1,170.44	85	1,148.96
2	DW-2	12/03/01	20.20	-	-	1,170.44	85	1,150.24
2	DW-2	01/29/02	21.31	-	-	1,170.44	85	1,149.13
2	DW-2	02/08/02	21.76	-	-	1,170.44	85	1,148.68
2	DW-2	03/19/02	22.69	-	-	1,170.44	85	1,147.75
2	DW-2	04/16/02	19.97	-	-	1,170.44	85	1,150.47
2	DW-2	05/23/02	20.10	-	-	1,170.44	85	1,150.34
2	DW-2	06/07/02	19.77	-	-	1,170.44	85	1,150.67
2	DW-2	08/19/02	17.52	-	-	1,170.44	85	1,152.92
2	DW-2	11/05/02	17.12	-	-	1,170.44	85	1,153.32
2	DW-2	01/16/03	18.51	-	-	1,170.44	85	1,151.93
2	DW-2	04/03/03	20.16	-	-	1,170.44	85	1,150.28
2	DW-2	07/24/03	19.40	-	-	1,170.44	85	1,151.04
2	DW-2	10/24/03	19.33	-	-	1,170.44	85	1,151.11
2	DW-2	02/04/04	19.85	-	-	1,170.44	85	1,150.59

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
2	DW-2	04/07/04	19.86	-	-	1,170.44	85	1,150.58
2	DW-2	08/24/04	19.05	-	-	1,170.44	85	1,151.39
2	DW-2	02/16/05	19.77	-	-	1,170.44	85	1,150.67
2	DW-2	11/02/05	16.81	-	-	1,170.44	85	1,153.63
2	DW-2	05/04/06	15.67	-	-	1,170.44	85	1,154.77
2	DW-2	11/29/06	20.41	-	-	1,170.44	85	1,150.03
2	DW-2	03/20/07	19.06	-	-	1,170.44	85	1,151.38
2	DW-2	09/24/07	19.13	-	-	1,170.44	85	1,151.31
2	DW-2	02/12/08	18.23	-	-	1,170.44	85	1,152.21
2	DW-2	11/10/08	18.00	-	-	1,170.44	85	1,152.44
2	DW-2	02/11/09	19.22	-	-	1,170.44	85	1,151.22
2	DW-2	08/11/09	18.00	-	-	1,170.44	85	1,152.44
2	DW-2	02/03/10	16.84	-	-	1,170.44	85	1,153.60
2	DW-2	10/28/10	17.11	-	-	1,170.44	85	1,153.33
2	DW-2	03/03/11	16.31	-	-	1,170.44	85	1,154.13
3	DW-3	03/16/98	24.08	-	-	1,176.29	90	1,152.21
3	DW-3	03/25/98	24.44	-	-	1,176.29	90	1,151.85
3	DW-3	04/22/98	23.23	-	-	1,176.29	90	1,153.06
3	DW-3	05/20/98	24.00	-	-	1,176.29	90	1,152.29
3	DW-3	05/21/98	25.25	-	-	1,176.29	90	1,151.04
3	DW-3	06/13/98	24.46	-	-	1,176.29	90	1,151.83
3	DW-3	08/20/98	24.48	-	-	1,176.29	90	1,151.81
3	DW-3	09/08/98	26.38	-	-	1,176.29	90	1,149.91
3	DW-3*	12/23/98	26.79	-	-	1,176.29	90	1,149.50
3	DW-3	12/23/98	26.74	-	-	1,176.29	90	1,149.55
3	DW-3	12/30/98	26.68	-	-	1,176.29	90	1,149.61
3	DW-3	01/25/99	27.24	-	-	1,176.29	90	1,149.05
3	DW-3	02/18/99	27.84	-	-	1,176.29	90	1,148.45
3	DW-3	03/17/99	27.30	-	-	1,176.29	90	1,148.99
3	DW-3	04/22/99	26.06	-	-	1,176.29	90	1,150.23
3	DW-3	04/28/99	26.42	-	-	1,176.29	90	1,149.87
3	DW-3	05/21/99	25.07	-	-	1,176.29	90	1,151.22
3	DW-3	07/19/99	25.85	-	-	1,176.29	90	1,150.44
3	DW-3	08/23/99	26.17	-	-	1,176.29	90	1,150.12
3	DW-3	09/22/99	25.50	-	-	1,176.29	90	1,150.79
3	DW-3	10/25/99	26.67	-	-	1,176.29	90	1,149.62
3	DW-3	11/24/99	27.27	-	-	1,176.29	90	1,149.02
3	DW-3	12/09/99	27.12	-	-	1,176.29	90	1,149.17
3	DW-3	01/13/00	27.57	-	-	1,176.29	90	1,148.72
3	DW-3	02/17/00	22.57	-	-	1,176.29	90	1,153.72
3	DW-3	04/20/00	28.11	-	-	1,176.29	90	1,148.18
3	DW-3	05/23/00	27.42	-	-	1,176.29	90	1,148.87
3	DW-3	06/17/00	27.96	-	-	1,176.29	90	1,148.33
3	DW-3	07/27/00	28.77	-	-	1,176.29	90	1,147.52
3	DW-3	08/16/00	28.62	-	-	1,176.29	90	1,147.67
3	DW-3	09/12/00	26.99	-	-	1,176.29	90	1,149.30
3	DW-3	10/20/00	28.47	-	-	1,176.29	90	1,147.82
3	DW-3	12/13/00	28.95	-	-	1,176.29	90	1,147.34
3	DW-3	01/16/01	28.55	-	-	1,176.29	90	1,147.74
3	DW-3	04/12/01	26.88	-	-	1,176.29	90	1,149.41
3	DW-3	05/11/01	24.77	-	-	1,176.29	90	1,151.52
3	DW-3	06/22/01	25.29	-	-	1,176.29	90	1,151.00
3	DW-3	07/30/01	25.59	-	-	1,176.29	90	1,150.70
3	DW-3	08/13/01	26.37	-	-	1,176.29	90	1,149.92
3	DW-3	09/11/01	26.49	-	-	1,176.29	90	1,149.80
3	DW-3	10/09/01	25.91	-	-	1,176.29	90	1,150.38
3	DW-3	11/19/01	27.02	-	-	1,176.29	90	1,149.27
3	DW-3	12/03/01	26.53	-	-	1,176.29	90	1,149.76
3	DW-3	01/29/02	27.80	-	-	1,176.29	90	1,148.49
3	DW-3	02/08/02	28.26	-	-	1,176.29	90	1,148.03
3	DW-3	03/19/02	28.57	-	-	1,176.29	90	1,147.72
3	DW-3	04/16/02	26.91	-	-	1,176.29	90	1,149.38
3	DW-3	05/23/02	26.71	-	-	1,176.29	90	1,149.58

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
3	DW-3	06/07/02	26.11	-	-	1,176.29	90	1,150.18
3	DW-3	08/19/02	24.00	-	-	1,176.29	90	1,152.29
3	DW-3	11/05/02	23.38	-	-	1,176.29	90	1,152.91
3	DW-3	01/16/03	24.31	-	-	1,176.29	90	1,151.98
3	DW-3	04/03/03	25.45	-	-	1,176.29	90	1,150.84
3	DW-3	07/24/03	24.69	-	-	1,176.29	90	1,151.60
3	DW-3	10/24/03	25.58	-	-	1,176.29	90	1,150.71
3	DW-3	02/04/04	26.06	-	-	1,176.29	90	1,150.23
3	DW-3	04/07/04	26.36	-	-	1,176.29	90	1,149.93
3	DW-3	08/24/04	26.42	-	-	1,176.29	90	1,149.87
3	DW-3	02/16/05	26.09	-	-	1,176.29	90	1,150.20
3	DW-3	11/02/05	23.00	-	-	1,176.29	90	1,153.29
3	DW-3	05/04/06	22.17	-	-	1,176.29	90	1,154.12
3	DW-3	05/04/06	Abandoned					
3	DW-3R	05/03/07	23.25	-	-	1,174.49	92	1,151.24
3	DW-3R	09/24/07	24.98	-	-	1,174.49	92	1,149.51
3	DW-3R	02/12/08	23.87	-	-	1,174.49	92	1,150.62
3	DW-3R	11/10/08	24.70	-	-	1,174.49	92	1,149.79
3	DW-3R	02/11/09	24.70	-	-	1,174.49	92	1,149.79
3	DW-3R	08/11/09	23.83	-	-	1,174.49	92	1,150.66
3	DW-3R	02/03/10	22.19	-	-	1,174.49	92	1,152.30
3	DW-3R	10/28/10	21.99	-	-	1,174.49	92	1,152.50
3	DW-3R	03/01/11	23.62	-	-	1,174.49	92	1,150.87
4	DW-4	03/16/98	19.17	-	-	1,171.74	90	1,152.57
4	DW-4	03/25/98	20.08	-	-	1,171.74	90	1,151.66
4	DW-4	04/22/98	18.95	-	-	1,171.74	90	1,152.79
4	DW-4	05/20/98	19.78	-	-	1,171.74	90	1,151.96
4	DW-4	05/21/98	20.77	-	-	1,171.74	90	1,150.97
4	DW-4	06/13/98	19.77	-	-	1,171.74	90	1,151.97
4	DW-4	08/20/98	20.78	-	-	1,171.74	90	1,150.96
4	DW-4	09/08/98	21.80	-	-	1,171.74	90	1,149.94
4	DW-4	01/25/99	22.62	-	-	1,171.74	90	1,149.12
4	DW-4	02/18/99	23.55	-	-	1,171.74	90	1,148.19
4	DW-4	03/17/99	23.15	-	-	1,171.74	90	1,148.59
4	DW-4	04/22/99	21.34	-	-	1,171.74	90	1,150.40
4	DW-4	04/28/99	22.33	-	-	1,171.74	90	1,149.41
4	DW-4	05/21/99	21.05	-	-	1,171.74	90	1,150.69
4	DW-4	07/19/99	22.06	-	-	1,171.74	90	1,149.68
4	DW-4	08/23/99	22.61	-	-	1,171.74	90	1,149.13
4	DW-4	09/22/99	21.38	-	-	1,171.74	90	1,150.36
4	DW-4	10/25/99	21.93	-	-	1,171.74	90	1,149.81
4	DW-4	11/24/99	22.91	-	-	1,171.74	90	1,148.83
4	DW-4	12/09/99	22.85	-	-	1,171.74	90	1,148.89
4	DW-4	01/13/00	23.04	-	-	1,171.74	90	1,148.70
4	DW-4	02/17/00	23.89	-	-	1,171.74	90	1,147.85
4	DW-4	04/20/00	24.18	-	-	1,171.74	90	1,147.56
4	DW-4	05/23/00	23.16	-	-	1,171.74	90	1,148.58
4	DW-4	06/17/00	23.82	-	-	1,171.74	90	1,147.92
4	DW-4	07/27/00	22.69	-	-	1,171.74	90	1,149.05
4	DW-4	08/16/00	23.67	-	-	1,171.74	90	1,148.07
4	DW-4	09/12/00	23.46	-	-	1,171.74	90	1,148.28
4	DW-4	10/20/00	24.50	-	-	1,171.74	90	1,147.24
4	DW-4	12/13/00	24.86	-	-	1,171.74	90	1,146.88
4	DW-4	01/16/01	23.58	-	-	1,171.74	90	1,148.16
4	DW-4	02/15/01	25.82	-	-	1,171.74	90	1,145.92
4	DW-4	03/08/01	24.74	-	-	1,171.74	90	1,147.00
4	DW-4	04/12/01	21.95	-	-	1,171.74	90	1,149.79
4	DW-4	05/11/01	19.96	-	-	1,171.74	90	1,151.78
4	DW-4	06/22/01	20.83	-	-	1,171.74	90	1,150.91
4	DW-4	07/30/01	21.60	-	-	1,171.74	90	1,150.14
4	DW-4	08/13/01	21.92	-	-	1,171.74	90	1,149.82
4	DW-4	09/11/01	22.52	-	-	1,171.74	90	1,149.22
4	DW-4	10/09/01	21.66	-	-	1,171.74	90	1,150.08

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
4	DW-4	11/19/01	22.41	-	-	1,171.74	90	1,149.33
4	DW-4	12/03/01	21.75	-	-	1,171.74	90	1,149.99
4	DW-4	01/29/02	22.76	-	-	1,171.74	90	1,148.98
4	DW-4	02/08/02	23.26	-	-	1,171.74	90	1,148.48
4	DW-4	03/19/02	23.54	-	-	1,171.74	90	1,148.20
4	DW-4	04/16/02	21.67	-	-	1,171.74	90	1,150.07
4	DW-4	05/23/02	21.15	-	-	1,171.74	90	1,150.59
4	DW-4	06/07/02	20.90	-	-	1,171.74	90	1,150.84
4	DW-4	08/19/02	18.97	-	-	1,171.74	90	1,152.77
4	DW-4	11/05/02	18.46	-	-	1,171.74	90	1,153.28
4	DW-4	01/16/03	20.10	-	-	1,171.74	90	1,151.64
4	DW-4	04/03/03	20.64	-	-	1,171.74	90	1,151.10
4	DW-4	07/24/03	19.68	-	-	1,171.74	90	1,152.06
4	DW-4	10/24/03	20.66	-	-	1,171.74	90	1,151.08
4	DW-4	02/04/04	21.21	-	-	1,171.74	90	1,150.53
4	DW-4	04/07/04	21.37	-	-	1,171.74	90	1,150.37
4	DW-4	08/24/04	20.35	-	-	1,171.74	90	1,151.39
4	DW-4	11/02/05	18.05	-	-	1,171.74	90	1,153.69
4	DW-4	02/16/05	21.09	-	-	1,171.74	90	1,150.65
4	DW-4	05/04/06	17.51	-	-	1,171.74	90	1,154.23
4	DW-4	11/29/06	21.01	-	-	1,171.74	90	1,150.73
4	DW-4	03/20/07	20.60	-	-	1,171.74	90	1,151.14
4	DW-4	09/24/07	20.47	-	-	1,171.74	90	1,151.27
4	DW-4	02/12/08	19.92	-	-	1,171.74	90	1,151.82
4	DW-4	11/10/08	19.39	-	-	1,171.74	90	1,152.35
4	DW-4	02/11/09	20.65	-	-	1,171.74	90	1,151.09
4	DW-4	08/11/09	19.32	-	-	1,171.74	90	1,152.42
4	DW-4	02/03/10	18.24	-	-	1,171.74	90	1,153.50
4	DW-4	10/28/10	18.79	-	-	1,171.74	90	1,152.95
4	DW-4	03/01/11	19.67	-	-	1,171.74	90	1,152.07
5	MW-10D	04/22/98	18.67	-	-	1,172.25	90	1,153.58
5	MW-10D	05/20/98	19.55	-	-	1,172.25	90	1,152.70
5	MW-10D	05/21/98	21.78	-	-	1,172.25	90	1,150.47
5	MW-10D	06/13/98	20.82	-	-	1,172.25	90	1,151.43
5	MW-10D	08/20/98	21.94	-	-	1,172.25	90	1,150.31
5	MW-10D	09/08/98	23.10	-	-	1,172.25	90	1,149.15
5	MW-10D*	12/23/98	23.22	-	-	1,172.25	90	1,149.03
5	MW-10D	12/23/98	23.20	-	-	1,172.25	90	1,149.05
5	MW-10D	12/30/98	23.13	-	-	1,172.25	90	1,149.12
5	MW-10D	01/25/99	23.55	-	-	1,172.25	90	1,148.70
5	MW-10D	02/18/99	24.17	-	-	1,172.25	90	1,148.08
5	MW-10D	03/17/99	23.78	-	-	1,172.25	90	1,148.47
5	MW-10D	03/18/99	23.51	-	-	1,172.25	90	1,148.74
5	MW-10D	04/22/99	21.88	-	-	1,172.25	90	1,150.37
5	MW-10D	04/28/99	22.18	-	-	1,172.25	90	1,150.07
5	MW-10D	05/21/99	20.94	-	-	1,172.25	90	1,151.31
5	MW-10D	07/19/99	21.74	-	-	1,172.25	90	1,150.51
5	MW-10D	08/23/99	22.12	-	-	1,172.25	90	1,150.13
5	MW-10D	09/22/99	21.24	-	-	1,172.25	90	1,151.01
5	MW-10D	10/25/99	22.68	-	-	1,172.25	90	1,149.57
5	MW-10D	11/24/99	23.29	-	-	1,172.25	90	1,148.96
5	MW-10D	12/09/99	23.12	-	-	1,172.25	90	1,149.13
5	MW-10D	01/13/00	23.41	-	-	1,172.25	90	1,148.84
5	MW-10D	02/17/00	23.47	-	-	1,172.25	90	1,148.78
5	MW-10D	05/23/00	23.25	-	-	1,172.25	90	1,149.00
5	MW-10D	04/20/00	23.97	-	-	1,172.25	90	1,148.28
5	MW-10D	06/17/00	27.34	-	-	1,172.25	90	1,144.91
5	MW-10D	07/27/00	23.57	-	-	1,172.25	90	1,148.68
5	MW-10D	08/16/00	22.13	-	-	1,172.25	90	1,150.12
5	MW-10D	09/12/00	24.02	-	-	1,172.25	90	1,148.23
5	MW-10D	10/20/00	24.35	-	-	1,172.25	90	1,147.90
5	MW-10D	12/13/00	24.74	-	-	1,172.25	90	1,147.51
5	MW-10D	01/16/01	23.87	-	-	1,172.25	90	1,148.38

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
5	MW-10D	02/15/01	25.95	-	-	1,172.25	90	1,146.30
5	MW-10D	03/08/01	24.73	-	-	1,172.25	90	1,147.52
5	MW-10D	04/12/01	22.39	-	-	1,172.25	90	1,149.86
5	MW-10D	05/11/01	20.91	-	-	1,172.25	90	1,151.34
5	MW-10D	06/22/01	21.48	-	-	1,172.25	90	1,150.77
5	MW-10D	07/30/01	22.14	-	-	1,172.25	90	1,150.11
5	MW-10D	08/13/01	22.52	-	-	1,172.25	90	1,149.73
5	MW-10D	09/11/01	21.96	-	-	1,172.25	90	1,150.29
5	MW-10D	10/09/01	21.49	-	-	1,172.25	90	1,150.76
5	MW-10D	11/19/01	23.59	-	-	1,172.25	90	1,148.66
5	MW-10D	12/03/01	23.00	-	-	1,172.25	90	1,149.25
5	MW-10D	01/29/02	24.37	-	-	1,172.25	90	1,147.88
5	MW-10D	02/08/02	24.68	-	-	1,172.25	90	1,147.57
5	MW-10D	03/19/02	25.11	-	-	1,172.25	90	1,147.14
5	MW-10D	04/16/02	19.71	-	-	1,172.25	90	1,152.54
5	MW-10D	05/23/02	22.40	-	-	1,172.25	90	1,149.85
5	MW-10D	06/07/02	22.63	-	-	1,172.25	90	1,149.62
5	MW-10D	08/19/02	20.09	-	-	1,172.25	90	1,152.16
5	MW-10D	11/05/02	15.00	-	-	1,172.25	90	1,157.25
5	MW-10D	01/16/03	16.47	-	-	1,172.25	90	1,155.78
5	MW-10D	04/03/03	17.75	-	-	1,172.25	90	1,154.50
5	MW-10D	07/24/03	16.16	-	-	1,172.25	90	1,156.09
5	MW-10D	10/24/03	21.83	-	-	1,172.25	90	1,150.42
5	MW-10D	02/04/04	19.13	-	-	1,172.25	90	1,153.12
5	MW-10D	04/07/04	22.55	-	-	1,172.25	90	1,149.70
5	MW-10D	08/24/04	21.64	-	-	1,172.25	90	1,150.61
5	MW-10D	02/16/05	22.25	-	-	1,172.25	90	1,150.00
5	MW-10D	11/02/05	19.22	-	-	1,172.25	90	1,153.03
5	MW-10D	05/04/06	17.80	-	-	1,172.25	90	1,154.45
5	MW-10D	11/29/06	21.78	-	-	1,172.25	90	1,150.47
5	MW-10D	03/20/07	21.55	-	-	1,172.25	90	1,150.70
5	MW-10D	09/24/07	22.11	-	-	1,172.25	90	1,150.14
5	MW-10D	02/12/08	20.16	-	-	1,172.25	90	1,152.09
5	MW-10D	11/10/08	20.52	-	-	1,172.25	90	1,151.73
5	MW-10D	02/11/09	21.51	-	-	1,172.25	90	1,150.74
5	MW-10D	08/11/09	20.61	-	-	1,172.25	90	1,151.64
5	MW-10D	02/03/10	18.79	-	-	1,172.25	90	1,153.46
5	MW-10D	10/28/10	19.07	-	-	1,172.25	90	1,153.18
5	MW-10D	03/03/11	20.61	-	-	1,172.25	90	1,151.64
6	MW-14D	04/22/98	21.89	-	-	1,175.48	90	1,153.59
6	MW-14D	05/20/98	23.00	-	-	1,175.48	90	1,152.48
6	MW-14D	05/21/98	24.35	-	-	1,175.48	90	1,151.13
6	MW-14D	06/13/98	23.99	-	-	1,175.48	90	1,151.49
6	MW-14D	08/20/98	24.54	-	-	1,175.48	90	1,150.94
6	MW-14D	09/08/98	26.02	-	-	1,175.48	90	1,149.46
6	MW-14D*	12/23/98	25.85	-	-	1,175.48	90	1,149.63
6	MW-14D	12/23/98	25.85	-	-	1,175.48	90	1,149.63
6	MW-14D	12/30/98	26.03	-	-	1,175.48	90	1,149.45
6	MW-14D	01/25/99	26.48	-	-	1,175.48	90	1,149.00
6	MW-14D	02/18/99	27.03	-	-	1,175.48	90	1,148.45
6	MW-14D	03/17/99	26.46	-	-	1,175.48	90	1,149.02
6	MW-14D	04/22/99	25.12	-	-	1,175.48	90	1,150.36
6	MW-14D	04/28/99	25.13	-	-	1,175.48	90	1,150.35
6	MW-14D	05/21/99	24.11	-	-	1,175.48	90	1,151.37
6	MW-14D	06/24/99	24.10	-	-	1,175.48	90	1,151.38
6	MW-14D	07/19/99	25.01	-	-	1,175.48	90	1,150.47
6	MW-14D	08/23/99	25.68	-	-	1,175.48	90	1,149.80
6	MW-14D	09/22/99	24.70	-	-	1,175.48	90	1,150.78
6	MW-14D	10/25/99	25.32	-	-	1,175.48	90	1,150.16
6	MW-14D	11/24/99	26.40	-	-	1,175.48	90	1,149.08
6	MW-14D	12/09/99	26.28	-	-	1,175.48	90	1,149.20
6	MW-14D	01/13/00	26.58	-	-	1,175.48	90	1,148.90
6	MW-14D	02/17/00	26.50	-	-	1,175.48	90	1,148.98

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
6	MW-14D	04/20/00	26.43	-	-	1,175.48	90	1,149.05
6	MW-14D	05/23/00	26.31	-	-	1,175.48	90	1,149.17
6	MW-14D	06/17/00	26.05	-	-	1,175.48	90	1,149.43
6	MW-14D	07/27/00	26.50	-	-	1,175.48	90	1,148.98
6	MW-14D	08/16/00	25.55	-	-	1,175.48	90	1,149.93
6	MW-14D	09/12/00	27.31	-	-	1,175.48	90	1,148.17
6	MW-14D	10/20/00	27.45	-	-	1,175.48	90	1,148.03
6	MW-14D	12/13/00	27.97	-	-	1,175.48	90	1,147.51
6	MW-14D	01/16/01	25.20	-	-	1,175.48	90	1,150.28
6	MW-14D	02/15/01	26.48	-	-	1,175.48	90	1,149.00
6	MW-14D	03/08/01	27.64	-	-	1,175.48	90	1,147.84
6	MW-14D	04/12/01	25.87	-	-	1,175.48	90	1,149.61
6	MW-14D	05/11/01	23.66	-	-	1,175.48	90	1,151.82
6	MW-14D	06/22/01	24.19	-	-	1,175.48	90	1,151.29
6	MW-14D	07/30/01	24.69	-	-	1,175.48	90	1,150.79
6	MW-14D	08/13/01	25.38	-	-	1,175.48	90	1,150.10
6	MW-14D	09/11/01	25.18	-	-	1,175.48	90	1,150.30
6	MW-14D	10/09/01	24.87	-	-	1,175.48	90	1,150.61
6	MW-14D	11/19/01	26.15	-	-	1,175.48	90	1,149.33
6	MW-14D	12/03/01	25.64	-	-	1,175.48	90	1,149.84
6	MW-14D	01/29/02	26.77	-	-	1,175.48	90	1,148.71
6	MW-14D	02/08/02	27.18	-	-	1,175.48	90	1,148.30
6	MW-14D	03/19/02	27.87	-	-	1,175.48	90	1,147.61
6	MW-14D	04/16/02	25.56	-	-	1,175.48	90	1,149.92
6	MW-14D	05/23/02	25.40	-	-	1,175.48	90	1,150.08
6	MW-14D	06/07/02	25.74	-	-	1,175.48	90	1,149.74
6	MW-14D	08/19/02	22.92	-	-	1,175.48	90	1,152.56
6	MW-14D	11/05/02	22.25	-	-	1,175.48	90	1,153.23
6	MW-14D	01/16/03	23.43	-	-	1,175.48	90	1,152.05
6	MW-14D	04/03/03	24.98	-	-	1,175.48	90	1,150.50
6	MW-14D	07/24/03	23.57	-	-	1,175.48	90	1,151.91
6	MW-14D	10/24/03	24.59	-	-	1,175.48	90	1,150.89
6	MW-14D	02/04/04	-	-	-	1,175.48	90	-
6	MW-14D	04/07/04	25.33	-	-	1,175.48	90	1,150.15
6	MW-14D	08/24/04	24.56	-	-	1,175.48	90	1,150.92
6	MW-14D	02/16/05	24.11	-	-	1,175.48	90	1,151.37
6	MW-14D	11/02/05	22.93	-	-	1,175.48	90	1,152.55
6	MW-14D	05/04/06	20.91	-	-	1,175.48	90	1,154.57
6	MW-14D	11/29/06	24.56	-	-	1,175.48	90	1,150.92
6	MW-14D	03/20/07	24.64	-	-	1,175.48	90	1,150.84
6	MW-14D	09/24/07	24.96	-	-	1,175.48	90	1,150.52
6	MW-14D	02/12/08	23.37	-	-	1,175.48	90	1,152.11
6	MW-14D	11/10/08	23.35	-	-	1,175.48	90	1,152.13
6	MW-14D	02/11/09	24.30	-	-	1,175.48	90	1,151.18
6	MW-14D	08/11/09	23.42	-	-	1,175.48	90	1,152.06
6	MW-14D	02/03/10	21.92	-	-	1,175.48	90	1,153.56
6	MW-14D	10/28/10	22.03	-	-	1,175.48	90	1,153.45
6	MW-14D	03/01/11	23.52	-	-	1,175.48	90	1,151.96
7	MW-5	04/22/98	16.80	-	-	1,170.41	89	1,153.61
7	MW-5	05/20/98	17.70	-	-	1,170.41	89	1,152.71
7	MW-5	05/21/98	20.55	-	-	1,170.41	89	1,149.86
7	MW-5	06/13/98	18.79	-	-	1,170.41	89	1,151.62
7	MW-5	08/20/98	20.56	-	-	1,170.41	89	1,149.85
7	MW-5*	12/23/98	21.49	-	-	1,170.41	89	1,148.92
7	MW-5	12/23/98	21.50	-	-	1,170.41	89	1,148.91
7	MW-5	12/30/98	21.43	-	-	1,170.41	89	1,148.98
7	MW-5	01/25/99	21.77	-	-	1,170.41	89	1,148.64
7	MW-5	02/18/99	22.36	-	-	1,170.41	89	1,148.05
7	MW-5	03/17/99	22.06	-	-	1,170.41	89	1,148.35
7	MW-5	03/18/99	21.68	-	-	1,170.41	89	1,148.73
7	MW-5	04/22/99	19.79	-	-	1,170.41	89	1,150.62
7	MW-5	05/21/99	18.97	-	-	1,170.41	89	1,151.44
7	MW-5	07/19/99	19.86	-	-	1,170.41	89	1,150.55

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
7	MW-5	08/23/99	20.82	-	-	1,170.41	89	1,149.59
7	MW-5	09/22/99	19.26	-	-	1,170.41	89	1,151.15
7	MW-5	10/25/99	19.93	-	-	1,170.41	89	1,150.48
7	MW-5	11/24/99	29.44	-	-	1,170.41	89	1,140.97
7	MW-5	12/09/99	21.16	-	-	1,170.41	89	1,149.25
7	MW-5	01/13/00	21.45	-	-	1,170.41	89	1,148.96
7	MW-5	02/17/00	21.45	-	-	1,170.41	89	1,148.96
7	MW-5	04/20/00	22.02	-	-	1,170.41	89	1,148.39
7	MW-5	05/23/00	21.21	-	-	1,170.41	89	1,149.20
7	MW-5	06/17/00	25.54	-	-	1,170.41	89	1,144.87
7	MW-5	07/27/00	21.59	-	-	1,170.41	89	1,148.82
7	MW-5	08/16/00	19.27	-	-	1,170.41	89	1,151.14
7	MW-5	09/12/00	22.26	-	-	1,170.41	89	1,148.15
7	MW-5	10/20/00	22.35	-	-	1,170.41	89	1,148.06
7	MW-5	12/13/00	22.62	-	-	1,170.41	89	1,147.79
7	MW-5	03/08/01	23.64	-	-	1,170.41	89	1,146.77
7	MW-5	04/12/01	20.20	-	-	1,170.41	89	1,150.21
7	MW-5	07/30/01	20.39	-	-	1,170.41	89	1,150.02
7	MW-5	08/13/01	20.67	-	-	1,170.41	89	1,149.74
7	MW-5	09/11/01	20.96	-	-	1,170.41	89	1,149.45
7	MW-5	10/09/01	19.56	-	-	1,170.41	89	1,150.85
7	MW-5	01/29/02	22.65	-	-	1,170.41	89	1,147.76
7	MW-5	03/19/02	23.25	-	-	1,170.41	89	1,147.16
7	MW-5	04/16/02	21.25	-	-	1,170.41	89	1,149.16
7	MW-5	05/23/02	20.74	-	-	1,170.41	89	1,149.67
7	MW-5	06/07/02	21.04	-	-	1,170.41	89	1,149.37
7	MW-5	08/19/02	18.24	-	-	1,170.41	89	1,152.17
7	MW-5	11/05/02	17.74	-	-	1,170.41	89	1,152.67
7	MW-5	01/16/03	19.01	-	-	1,170.41	89	1,151.40
7	MW-5	04/03/03	20.24	-	-	1,170.41	89	1,150.17
7	MW-5	07/24/03	18.98	-	-	1,170.41	89	1,151.43
7	MW-5	10/24/03	20.04	-	-	1,170.41	89	1,150.37
7	MW-5	02/04/04	-	-	-	1,170.41	89	-
7	MW-5	04/07/04	dry	-	-	1,170.41	89	-
7	MW-5	08/24/04	17.29	-	-	1,170.41	89	1,153.12
7	MW-5	02/16/05	20.36	-	-	1,170.41	89	1,150.05
7	MW-5	11/02/05	17.46	-	-	1,170.41	89	1,152.95
7	MW-5	05/04/06	15.61	-	-	1,170.41	89	1,154.80
7	MW-5	11/29/06	20.08	-	-	1,170.41	89	1,150.33
7	MW-5	03/20/07	22.14	-	-	1,170.41	89	1,148.27
7	MW-5	09/24/07	20.40	-	-	1,170.41	89	1,150.01
7	MW-5	02/12/08	18.21	-	-	1,170.41	89	1,152.20
7	MW-5	08/11/09	18.75	-	-	1,170.41	89	1,151.66
7	MW-5	10/28/10	18.96	-	-	1,170.41	89	1,151.45
7	MW-5	03/01/11	18.88	-	-	1,170.41	89	1,151.53
8	MW-7	04/22/98	19.38	-	-	1,172.20	80	1,152.82
8	MW-7	05/20/98	19.64	-	-	1,172.20	80	1,152.56
8	MW-7	05/21/98	20.85	-	-	1,172.20	80	1,151.35
8	MW-7	06/13/98	20.74	-	-	1,172.20	80	1,151.46
8	MW-7	08/20/98	21.20	-	-	1,172.20	80	1,151.00
8	MW-7	09/08/98	22.47	-	-	1,172.20	80	1,149.73
8	MW-7*	12/23/98	22.20	-	-	1,172.20	80	1,150.00
8	MW-7	12/23/98	22.26	-	-	1,172.20	80	1,149.94
8	MW-7	12/30/98	22.81	-	-	1,172.20	80	1,149.39
8	MW-7	01/25/99	22.92	-	-	1,172.20	80	1,149.28
8	MW-7	02/18/99	23.73	-	-	1,172.20	80	1,148.47
8	MW-7	03/17/99	23.37	-	-	1,172.20	80	1,148.83
8	MW-7	04/22/99	10.03	-	-	1,172.20	80	1,162.17
8	MW-7	04/28/99	21.76	-	-	1,172.20	80	1,150.44
8	MW-7	05/21/99	21.10	-	-	1,172.20	80	1,151.10
8	MW-7	07/19/99	22.06	-	-	1,172.20	80	1,150.14
8	MW-7	08/23/99	23.16	-	-	1,172.20	80	1,149.04
8	MW-7	09/22/99	22.69	-	-	1,172.20	80	1,149.51

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
8	MW-7	10/25/99	22.25	-	-	1,172.20	80	1,149.95
8	MW-7	11/24/99	23.10	-	-	1,172.20	80	1,149.10
8	MW-7	12/09/99	22.99	-	-	1,172.20	80	1,149.21
8	MW-7	01/13/00	23.23	-	-	1,172.20	80	1,148.97
8	MW-7	02/17/00	24.05	-	-	1,172.20	80	1,148.15
8	MW-7	04/20/00	24.38	-	-	1,172.20	80	1,147.82
8	MW-7	05/23/00	23.55	-	-	1,172.20	80	1,148.65
8	MW-7	06/17/00	23.21	-	-	1,172.20	80	1,148.99
8	MW-7	07/27/00	23.20	-	-	1,172.20	80	1,149.00
8	MW-7	08/16/00	23.44	-	-	1,172.20	80	1,148.76
8	MW-7	09/12/00	24.82	-	-	1,172.20	80	1,147.38
8	MW-7	Abandoned		-	-			
10	CW-4	03/16/98	21.60	-	-	1,173.38	110	1,151.78
10	CW-4	03/25/98	21.30	-	-	1,173.38	110	1,152.08
10	CW-4	04/22/98	20.32	-	-	1,173.38	110	1,153.06
10	CW-4	05/20/98	20.83	-	-	1,173.38	110	1,152.55
10	CW-4	06/13/98	23.65	-	-	1,173.38	110	1,149.73
10	CW-4	05/21/98	23.85	-	-	1,173.38	110	1,149.53
11	CW-5	04/22/98	39.03	-	-	1,168.49	90	1,129.46
11	CW-5	05/21/98	40.25	-	-	1,168.49	90	1,128.24
12	CW-6	04/22/98	42.25	-	-	1,171.55	97	1,129.30
12	CW-6	05/21/98	42.74	-	-	1,171.55	97	1,128.81
17	Bus Garage	04/22/98	15.67	-	-	1,169.05	50	1,153.38
17	Bus Garage	05/21/98	16.87	-	-	1,169.05	50	1,152.18
17	Bus Garage	08/20/98	17.58	-	-	1,169.05	50	1,151.47
18	CMW	04/22/98	21.18	-	-	1,171.42	120	1,150.24
18	CMW	05/21/98	21.56	-	-	1,171.42	120	1,149.86
18	CMW	08/20/98	23.24	-	-	1,171.42	120	1,148.18
18	CMW	04/28/99	23.53	-	-	1,171.42	120	1,147.89
18	CMW	08/20/98	23.24	-	-	1,171.42	120	1,148.18
18	CMW	05/21/99	22.61	-	-	1,171.42	120	1,148.81
18	CMW	07/19/99	23.64	-	-	1,171.42	120	1,147.78
18	CMW	11/24/99	24.27	-	-	1,171.42	120	1,147.15
18	CMW	12/09/99	24.32	-	-	1,171.42	120	1,147.10
18	CMW	01/13/00	24.34	-	-	1,171.42	120	1,147.08
18	CMW	02/17/00	24.10	-	-	1,171.42	120	1,147.32
18	CMW	04/20/00	24.72	-	-	1,171.42	120	1,146.70
18	CMW	10/20/00	25.51	-	-	1,171.42	120	1,145.91
18	CMW	12/13/00	25.21	-	-	1,171.42	120	1,146.21
18	CMW	01/16/01	25.40	-	-	1,171.42	120	1,146.02
18	CMW	02/15/01	25.64	-	-	1,171.42	120	1,145.78
18	CMW	03/08/01	25.53	-	-	1,171.42	120	1,145.89
18	CMW	04/12/01	23.59	-	-	1,171.42	120	1,147.83
18	CMW	05/11/01	21.13	-	-	1,171.42	120	1,150.29
18	CMW	06/22/01	21.81	-	-	1,171.42	120	1,149.61
18	CMW	08/13/01	24.77	-	-	1,171.42	120	1,146.65
20	MW-1	04/22/98	16.94	-	-	1,170.87	43	1,153.93
20	MW-1	05/21/98	17.76	-	-	1,170.87	43	1,153.11
20	MW-1	08/20/98	19.19	-	-	1,170.87	43	1,151.68
21	MW-2	04/22/98	17.71	-	-	1,171.20	38	1,153.49
21	MW-2	05/21/98	17.83	-	-	1,171.20	38	1,153.37
21	MW-2	08/20/98	19.29	-	-	1,171.20	38	1,151.91
23	MW-1	04/22/98	16.79	16.79	0.00	1,173.74	27	1,156.95
23	MW-1	08/20/98	18.38	18.38	0.00	1,173.74	27	1,155.36
23	MW-1	11/29/06	21.45	18.71	2.74	1,173.74	27	1,154.37
23	MW-1	03/20/07	21.61	19.90	1.71	1,173.74	27	1,153.43

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
23	MW-1	09/24/07	19.25	19.18	0.07	1,173.74	27	1,154.54
23	MW-1	02/12/08	21.70	19.01	2.69	1,173.74	27	1,154.08
23	MW-1	11/10/08	19.34	18.33	1.01	1,173.74	27	1,155.17
23	MW-1	02/11/09	22.05	19.26	2.79	1,173.74	27	1,153.81
23	MW-1	08/11/09	21.50	18.48	3.02	1,173.74	27	1,154.54
23	MW-1	02/03/10	21.45	16.51	4.94	1,173.74	27	1,156.04
23	MW-1	10/27/10	19.59	15.91	3.68	1,173.74	27	1,156.95
23	MW-1	11/03/10	19.70	15.77	3.93	1,173.74	27	1,157.03
23	MW-1	03/01/11	18.62	18.21	0.41	1,173.74	27	1,155.43
23	MW-1	04/15/11	16.41	15.98	0.43	1,173.74	27.8	1,157.66
24	MW-10	07/17/91	18.54	-	-	1,171.69	27	1,153.15
24	MW-10	08/13/91	17.98	-	-	1,171.69	27	1,153.71
24	MW-10	09/09/91	17.30	-	-	1,171.69	27	1,154.39
24	MW-10	10/31/91	15.33	-	-	1,171.69	27	1,156.36
24	MW-10	01/13/92	16.71	-	-	1,171.69	27	1,154.98
24	MW-10	12/23/93	16.21	-	-	1,171.69	27	1,155.48
24	MW-10	09/21/93	14.64	-	-	1,171.69	27	1,157.05
24	MW-10	06/27/94	14.69	-	-	1,171.69	27	1,157.00
24	MW-10	12/01/94	15.61	-	-	1,171.69	27	1,156.08
24	MW-10	03/09/95	17.03	-	-	1,171.69	27	1,154.66
24	MW-10	07/02/96	14.75	-	-	1,171.69	27	1,156.94
24	MW-10	04/10/97	14.93	-	-	1,171.69	27	1,156.76
24	MW-10	06/13/97	15.34	-	-	1,171.69	27	1,156.35
24	MW-10	09/09/97	14.93	-	-	1,171.69	27	1,156.76
24	MW-10	01/28/98	16.30	-	-	1,171.69	27	1,155.39
24	MW-10	04/22/98	15.01	-	-	1,171.69	27	1,156.68
24	MW-10	04/30/98	14.11	-	-	1,171.69	27	1,157.58
24	MW-10	05/20/98	15.05	-	-	1,171.69	27	1,156.64
24	MW-10	05/21/98	15.22	-	-	1,171.69	27	1,156.47
24	MW-10	06/13/98	15.44	-	-	1,171.69	27	1,156.25
24	MW-10	08/03/98	15.39	-	-	1,171.69	27	1,156.30
24	MW-10	08/20/98	16.20	-	-	1,171.69	27	1,155.49
24	MW-10	12/03/98	17.60	-	-	1,171.69	27	1,154.09
24	MW-10*	12/23/98	17.82	-	-	1,171.69	27	1,153.87
24	MW-10	12/23/98	17.83	-	-	1,171.69	27	1,153.86
24	MW-10	12/30/98	17.96	-	-	1,171.69	27	1,153.73
24	MW-10	01/25/99	18.41	-	-	1,171.69	27	1,153.28
24	MW-10	02/18/99	18.73	-	-	1,171.69	27	1,152.96
24	MW-10	03/17/99	19.09	-	-	1,171.69	27	1,152.60
24	MW-10	03/18/99	19.09	-	-	1,171.69	27	1,152.60
24	MW-10	04/05/99	18.71	-	-	1,171.69	27	1,152.98
24	MW-10	04/22/99	18.23	-	-	1,171.69	27	1,153.46
24	MW-10	04/28/99	18.00	-	-	1,171.69	27	1,153.69
24	MW-10	05/21/99	17.11	-	-	1,171.69	27	1,154.58
24	MW-10	06/21/99	16.25	-	-	1,171.69	27	1,155.44
24	MW-10	07/19/99	16.52	-	-	1,171.69	27	1,155.17
24	MW-10	08/23/99	17.98	-	-	1,171.69	27	1,153.71
24	MW-10	09/22/99	17.52	-	-	1,171.69	27	1,154.17
24	MW-10	10/06/99	17.80	-	-	1,171.69	27	1,153.89
24	MW-10	10/25/99	18.70	-	-	1,171.69	27	1,152.99
24	MW-10	11/24/99	18.60	-	-	1,171.69	27	1,153.09
24	MW-10	12/09/99	18.80	-	-	1,171.69	27	1,152.89
24	MW-10	01/13/00	19.22	-	-	1,171.69	27	1,152.47
24	MW-10	02/17/00	13.60	-	-	1,171.69	27	1,158.09
24	MW-10	04/20/00	20.01	-	-	1,171.69	27	1,151.68
24	MW-10	05/23/00	20.91	-	-	1,171.69	27	1,150.78
24	MW-10	06/17/00	20.24	-	-	1,171.69	27	1,151.45
24	MW-10	07/27/00	19.88	-	-	1,171.69	27	1,151.81
24	MW-10	08/16/00	20.72	-	-	1,171.69	27	1,150.97
24	MW-10	09/12/00	22.29	-	-	1,171.69	27	1,149.40
24	MW-10	10/20/00	20.63	-	-	1,171.69	27	1,151.06
24	MW-10	12/13/00	20.72	-	-	1,171.69	27	1,150.97
24	MW-10	12/28/00	20.74	-	-	1,171.69	27	1,150.95

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
24	MW-10	01/16/01	20.92	-	-	1,171.69	27	1,150.77
24	MW-10	02/15/01	21.23	-	-	1,171.69	27	1,150.46
24	MW-10	03/08/01	21.39	-	-	1,171.69	27	1,150.30
24	MW-10	03/22/01	21.43	-	-	1,171.69	27	1,150.26
24	MW-10	04/12/01	20.99	-	-	1,171.69	27	1,150.70
24	MW-10	05/11/01	17.89	-	-	1,171.69	27	1,153.80
24	MW-10	06/22/01	16.48	-	-	1,171.69	27	1,155.21
24	MW-10	06/26/01	16.55	-	-	1,171.69	27	1,155.14
24	MW-10	07/30/01	17.05	-	-	1,171.69	27	1,154.64
24	MW-10	08/13/01	17.44	-	-	1,171.69	27	1,154.25
24	MW-10	09/11/01	17.77	-	-	1,171.69	27	1,153.92
24	MW-10	09/28/01	18.10	-	-	1,171.69	27	1,153.59
24	MW-10	10/09/01	18.22	-	-	1,171.69	27	1,153.47
24	MW-10	11/19/01	18.78	-	-	1,171.69	27	1,152.91
24	MW-10	12/03/01	18.77	-	-	1,171.69	27	1,152.92
24	MW-10	01/29/02	19.53	-	-	1,171.69	27	1,152.16
24	MW-10	02/08/02	20.70	-	-	1,171.69	27	1,150.99
24	MW-10	03/12/02	20.15	-	-	1,171.69	27	1,151.54
24	MW-10	03/19/02	20.28	-	-	1,171.69	27	1,151.41
24	MW-10	04/16/02	23.10	-	-	1,171.69	27	1,148.59
24	MW-10	05/23/02	18.55	-	-	1,171.69	27	1,153.14
24	MW-10	06/07/02	18.36	-	-	1,171.69	27	1,153.33
24	MW-10	08/19/02	16.48	-	-	1,171.69	27	1,155.21
24	MW-10	10/11/02	14.89	-	-	1,171.69	27	1,156.80
24	MW-10	11/05/02	19.55	-	-	1,171.69	27	1,152.14
24	MW-10	01/16/03	20.73	-	-	1,171.69	27	1,150.96
24	MW-10	04/03/03	21.87	-	-	1,171.69	27	1,149.82
24	MW-10	06/10/03	16.53	-	-	1,171.69	27	1,155.16
24	MW-10	07/24/03	26.67	-	-	1,171.69	27	1,145.02
24	MW-10	10/24/03	17.79	-	-	1,171.69	27	1,153.90
24	MW-10	02/04/03	24.53	-	-	1,171.69	27	1,147.16
24	MW-10	02/25/04	19.43	-	-	1,171.69	27	1,152.26
24	MW-10	04/07/04	19.40	-	-	1,171.69	27	1,152.29
24	MW-10	08/24/04	17.82	-	-	1,171.69	27	1,153.87
24	MW-10	02/16/05	18.71	-	-	1,171.69	27	1,152.98
24	MW-10	11/02/05	15.25	-	-	1,171.69	27	1,156.44
24	MW-10	05/04/06	15.98	-	-	1,171.69	27	1,155.71
24	MW-10	11/29/06	17.99	-	-	1,171.69	27	1,153.70
24	MW-10	03/20/07	19.02	-	-	1,171.69	27	1,152.67
24	MW-10	09/24/07	18.32	-	-	1,171.69	27	1,153.37
24	MW-10	02/12/08	18.01	-	-	1,171.69	27	1,153.68
24	MW-10	11/10/08	17.55	-	-	1,171.69	27	1,154.14
24	MW-10	02/11/09	18.32	-	-	1,171.69	27	1,153.37
24	MW-10	08/11/09	16.77	-	-	1,171.69	27	1,154.92
24	MW-10	02/03/10	15.95	-	-	1,171.69	27	1,155.74
24	MW-10	10/28/10	16.17	-	-	1,171.69	27	1,155.52
24	MW-10	03/03/11	16.77	-	-	1,171.69	27	1,154.92
25	MW-14	04/22/98	17.92	-	-	1,173.20	29	1,155.28
25	MW-14	05/20/98	18.26	-	-	1,173.20	29	1,154.94
25	MW-14	05/21/98	18.61	-	-	1,173.20	29	1,154.59
25	MW-14	06/13/98	18.90	-	-	1,173.20	29	1,154.30
25	MW-14	08/20/98	19.80	-	-	1,173.20	29	1,153.40
25	MW-14*	12/23/98	21.30	-	-	1,173.20	29	1,151.90
25	MW-14	12/23/98	21.24	-	-	1,173.20	29	1,151.96
25	MW-14	12/30/98	21.31	-	-	1,173.20	29	1,151.89
25	MW-14	01/25/99	21.80	-	-	1,173.20	29	1,151.40
25	MW-14	02/18/99	22.13	-	-	1,173.20	29	1,151.07
25	MW-14	03/17/99	22.45	-	-	1,173.20	29	1,150.75
25	MW-14	03/18/99	22.47	-	-	1,173.20	29	1,150.73
25	MW-14	04/22/99	21.25	-	-	1,173.20	29	1,151.95
25	MW-14	04/28/99	21.12	-	-	1,173.20	29	1,152.08
25	MW-14	05/21/99	20.17	-	-	1,173.20	29	1,153.03
25	MW-14	06/24/99	19.48	-	-	1,173.20	29	1,153.72

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
25	MW-14	07/19/99	19.86	-	-	1,173.20	29	1,153.34
25	MW-14	08/23/99	20.74	-	-	1,173.20	29	1,152.46
25	MW-14	09/22/99	20.78	-	-	1,173.20	29	1,152.42
25	MW-14	10/25/99	21.32	-	-	1,173.20	29	1,151.88
25	MW-14	11/24/99	21.80	-	-	1,173.20	29	1,151.40
25	MW-14	12/09/99	21.98	-	-	1,173.20	29	1,151.22
25	MW-14	01/13/00	22.35	-	-	1,173.20	29	1,150.85
25	MW-14	02/17/00	22.56	-	-	1,173.20	29	1,150.64
25	MW-14	04/20/00	22.91	-	-	1,173.20	29	1,150.29
25	MW-14	05/23/00	22.91	-	-	1,173.20	29	1,150.29
25	MW-14	06/17/00	23.04	-	-	1,173.20	29	1,150.16
25	MW-14	07/27/00	22.64	-	-	1,173.20	29	1,150.56
25	MW-14	08/16/00	22.97	-	-	1,173.20	29	1,150.23
25	MW-14	09/12/00	23.09	-	-	1,173.20	29	1,150.11
25	MW-14	10/20/00	23.51	-	-	1,173.20	29	1,149.69
25	MW-14	12/13/00	23.44	-	-	1,173.20	29	1,149.76
25	MW-14	01/16/01	23.68	-	-	1,173.20	29	1,149.52
25	MW-14	02/15/01	23.98	-	-	1,173.20	29	1,149.22
25	MW-14	03/08/01	24.08	-	-	1,173.20	29	1,149.12
25	MW-14	04/12/01	23.47	-	-	1,173.20	29	1,149.73
25	MW-14	05/11/01	19.85	-	-	1,173.20	29	1,153.35
25	MW-14	06/22/01	19.16	-	-	1,173.20	29	1,154.04
25	MW-14	07/30/01	20.06	-	-	1,173.20	29	1,153.14
25	MW-14	08/13/01	20.74	-	-	1,173.20	29	1,152.46
25	MW-14	09/11/01	20.90	-	-	1,173.20	29	1,152.30
25	MW-14	10/09/01	21.32	-	-	1,173.20	29	1,151.88
25	MW-14	11/19/01	21.82	-	-	1,173.20	29	1,151.38
25	MW-14	12/03/01	21.66	-	-	1,173.20	29	1,151.54
25	MW-14	01/29/02	22.53	-	-	1,173.20	29	1,150.67
25	MW-14	02/08/02	22.67	-	-	1,173.20	29	1,150.53
25	MW-14	03/19/02	23.15	-	-	1,173.20	29	1,150.05
25	MW-14	04/16/02	22.19	-	-	1,173.20	29	1,151.01
25	MW-14	05/23/02	21.11	-	-	1,173.20	29	1,152.09
25	MW-14	06/07/02	21.08	-	-	1,173.20	29	1,152.12
25	MW-14	08/19/02	18.90	-	-	1,173.20	29	1,154.30
25	MW-14	11/05/02	18.63	-	-	1,173.20	29	1,154.57
25	MW-14	01/16/03	19.27	-	-	1,173.20	29	1,153.93
25	MW-14	04/03/03	20.51	-	-	1,173.20	29	1,152.69
25	MW-14	07/24/03	18.88	-	-	1,173.20	29	1,154.32
25	MW-14	10/24/03	20.57	-	-	1,173.20	29	1,152.63
25	MW-14	02/04/04	21.88	-	-	1,173.20	29	1,151.32
25	MW-14	04/07/04	21.81	-	-	1,173.20	29	1,151.39
25	MW-14	08/24/04	20.43	-	-	1,173.20	29	1,152.77
25	MW-14	02/16/05	21.27	-	-	1,173.20	29	1,151.93
25	MW-14	11/02/05	17.50	-	-	1,173.20	29	1,155.70
25	MW-14	05/04/06	17.54	-	-	1,173.20	29	1,155.66
25	MW-14	11/29/06	20.79	-	-	1,173.20	29	1,152.41
25	MW-14	03/20/07	21.45	-	-	1,173.20	29	1,151.75
25	MW-14	09/24/07	20.86	-	-	1,173.20	29	1,152.34
25	MW-14	02/12/08	20.34	-	-	1,173.20	29	1,152.86
25	MW-14	11/10/08	19.91	-	-	1,173.20	29	1,153.29
25	MW-14	02/11/09	20.85	-	-	1,173.20	29	1,152.35
25	MW-14	08/11/09	19.31	-	-	1,173.20	29	1,153.89
25	MW-14	02/03/10	18.46	-	-	1,173.20	29	1,154.74
25	MW-14	10/28/10	18.79	-	-	1,173.20	29	1,154.41
25	MW-14	03/01/11	19.59	-	-	1,173.20	29	1,153.61
26	MW-15	04/22/98	17.67	-	-	1,175.09	25	1,157.42
26	MW-15	05/21/98	17.76	-	-	1,175.09	25	1,157.33
26	MW-15	06/13/98	18.01	-	-	1,175.09	25	1,157.08
26	MW-15	08/20/98	18.60	-	-	1,175.09	25	1,156.49
26	MW-15	11/29/98	20.50	-	-	1,175.09	25	1,154.59
26	MW-15	03/20/07	21.55	-	-	1,175.09	25	1,153.54
26	MW-15	09/24/07	20.97	-	-	1,175.09	25	1,154.12

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
26	MW-15	02/12/08	20.91	-	-	1,175.09	25	1,154.18
26	MW-15	11/10/08	20.37	-	-	1,175.09	25	1,154.72
26	MW-15	02/11/09	21.11	-	-	1,175.09	25	1,153.98
26	MW-15	08/11/09	19.51	-	-	1,175.09	25	1,155.58
26	MW-15	02/03/10	18.74	-	-	1,175.09	25	1,156.35
26	MW-15	10/28/10	19.21	-	-	1,175.09	25	1,155.88
26	MW-15	03/01/11	19.53	-	-	1,175.09	25	1,155.56
27	MW-16	04/28/93	21.20	-	-	1,171.10	26	1,149.90
27	MW-16	09/21/93	15.44	-	-	1,171.10	26	1,155.66
27	MW-16	12/23/93	17.03	-	-	1,171.10	26	1,154.07
27	MW-16	06/27/94	15.33	-	-	1,171.10	26	1,155.77
27	MW-16	12/01/94	16.27	-	-	1,171.10	26	1,154.83
27	MW-16	03/09/95	17.99	-	-	1,171.10	26	1,153.11
27	MW-16	07/02/96	15.93	-	-	1,171.10	26	1,155.17
27	MW-16	04/10/97	15.29	-	-	1,171.10	26	1,155.81
27	MW-16	06/13/97	16.54	-	-	1,171.10	26	1,154.56
27	MW-16	09/09/97	15.10	-	-	1,171.10	26	1,156.00
27	MW-16	01/29/98	17.24	-	-	1,171.10	26	1,153.86
27	MW-16	04/22/98	15.67	-	-	1,171.10	26	1,155.43
27	MW-16	05/20/98	15.85	-	-	1,171.10	26	1,155.25
27	MW-16	05/21/98	16.18	-	-	1,171.10	26	1,154.92
27	MW-16	06/13/98	16.48	-	-	1,171.10	26	1,154.62
27	MW-16	08/20/98	17.35	-	-	1,171.10	26	1,153.75
27	MW-16*	12/23/98	18.86	-	-	1,171.10	26	1,152.24
27	MW-16	12/23/98	18.82	-	-	1,171.10	26	1,152.28
27	MW-16	12/30/98	18.91	-	-	1,171.10	26	1,152.19
27	MW-16	01/25/99	19.38	-	-	1,171.10	26	1,151.72
27	MW-16	02/18/99	19.74	-	-	1,171.10	26	1,151.36
27	MW-16	03/17/99	20.09	-	-	1,171.10	26	1,151.01
27	MW-16	03/18/99	20.11	-	-	1,171.10	26	1,150.99
27	MW-16	04/22/99	18.90	-	-	1,171.10	26	1,152.20
27	MW-16	04/28/99	18.75	-	-	1,171.10	26	1,152.35
27	MW-16	05/21/99	17.81	-	-	1,171.10	26	1,153.29
27	MW-16	06/24/99	17.09	-	-	1,171.10	26	1,154.01
27	MW-16	07/19/99	17.45	-	-	1,171.10	26	1,153.65
27	MW-16	08/23/99	18.27	-	-	1,171.10	26	1,152.83
27	MW-16	09/22/99	18.35	-	-	1,171.10	26	1,152.75
27	MW-16	10/25/99	18.89	-	-	1,171.10	26	1,152.21
27	MW-16	11/24/99	19.46	-	-	1,171.10	26	1,151.64
27	MW-16	12/09/99	19.55	-	-	1,171.10	26	1,151.55
27	MW-16	01/13/00	19.96	-	-	1,171.10	26	1,151.14
27	MW-16	02/17/00	22.20	-	-	1,171.10	26	1,148.90
27	MW-16	04/20/00	20.56	-	-	1,171.10	26	1,150.54
27	MW-16	05/23/00	20.68	-	-	1,171.10	26	1,150.42
27	MW-16	06/17/00	21.73	-	-	1,171.10	26	1,149.37
27	MW-16	07/27/00	20.29	-	-	1,171.10	26	1,150.81
27	MW-16	08/16/00	20.60	-	-	1,171.10	26	1,150.50
27	MW-16	09/12/00	23.25	-	-	1,171.10	26	1,147.85
27	MW-16	10/20/00	21.12	-	-	1,171.10	26	1,149.98
27	MW-16	12/13/00	21.07	-	-	1,171.10	26	1,150.03
27	MW-16	01/16/01	21.33	-	-	1,171.10	26	1,149.77
27	MW-16	02/15/01	21.62	-	-	1,171.10	26	1,149.48
27	MW-16	03/08/01	21.79	-	-	1,171.10	26	1,149.31
27	MW-16	04/12/01	21.26	-	-	1,171.10	26	1,149.84
27	MW-16	05/11/01	17.70	-	-	1,171.10	26	1,153.40
27	MW-16	06/22/01	16.83	-	-	1,171.10	26	1,154.27
27	MW-16	07/30/01	17.67	-	-	1,171.10	26	1,153.43
27	MW-16	08/13/01	18.32	-	-	1,171.10	26	1,152.78
27	MW-16	09/11/01	18.51	-	-	1,171.10	26	1,152.59
27	MW-16	10/09/01	18.96	-	-	1,171.10	26	1,152.14
27	MW-16	11/19/01	19.45	-	-	1,171.10	26	1,151.65
27	MW-16	12/03/01	19.31	-	-	1,171.10	26	1,151.79
27	MW-16	01/29/02	20.19	-	-	1,171.10	26	1,150.91

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
27	MW-16	02/08/02	20.34	-	-	1,171.10	26	1,150.76
27	MW-16	03/19/02	20.86	-	-	1,171.10	26	1,150.24
27	MW-16	04/16/02	20.02	-	-	1,171.10	26	1,151.08
27	MW-16	05/23/02	18.90	-	-	1,171.10	26	1,152.20
27	MW-16	06/07/02	18.81	-	-	1,171.10	26	1,152.29
27	MW-16	08/19/02	16.69	-	-	1,171.10	26	1,154.41
27	MW-16	11/05/02	18.52	-	-	1,171.10	26	1,152.58
27	MW-16	01/16/03	16.99	-	-	1,171.10	26	1,154.11
27	MW-16	04/03/03	18.20	-	-	1,171.10	26	1,152.90
27	MW-16	07/24/03	16.58	-	-	1,171.10	26	1,154.52
27	MW-16	10/24/03	18.29	-	-	1,171.10	26	1,152.81
27	MW-16	02/04/04	19.60	-	-	1,171.10	26	1,151.50
27	MW-16	04/07/04	19.58	-	-	1,171.10	26	1,151.52
27	MW-16	08/24/04	18.15	-	-	1,171.10	26	1,152.95
27	MW-16	02/16/05	19.02	-	-	1,171.10	26	1,152.08
27	MW-16	11/02/05	15.27	-	-	1,171.10	26	1,155.83
27	MW-16	05/04/06	15.30	-	-	1,171.10	26	1,155.80
27	MW-16	11/29/06	18.48	-	-	1,171.10	26	1,152.62
27	MW-16	03/20/07	19.23	-	-	1,171.10	26	1,151.87
27	MW-16	09/24/07	18.61	-	-	1,171.10	26	1,152.49
27	MW-16	02/12/08	18.07	-	-	1,171.10	26	1,153.03
27	MW-16	11/10/08	17.65	-	-	1,171.10	26	1,153.45
27	MW-16	02/11/09	18.57	-	-	1,171.10	26	1,152.53
27	MW-16	08/11/09	17.02	-	-	1,171.10	26	1,154.08
27	MW-16	02/03/10	16.17	-	-	1,171.10	26	1,154.93
27	MW-16	10/28/10	15.79	-	-	1,171.10	26	1,155.31
27	MW-16	03/01/11	17.32	-	-	1,171.10	26	1,153.78
28	MW-17	04/28/93	20.50	-	-	1,171.53	62	1,151.03
28	MW-17	09/21/93	19.72	-		1,171.53	62	1,151.81
28	MW-17	12/23/93	20.12	-	-	1,171.53	62	1,151.41
28	MW-17	06/27/94	18.31	-	-	1,171.53	62	1,153.22
28	MW-17	12/01/94	19.11	-	-	1,171.53	62	1,152.42
28	MW-17	03/09/95	21.04	-	-	1,171.53	62	1,150.49
28	MW-17	07/02/96	19.23	-	-	1,171.53	62	1,152.30
28	MW-17	04/10/97	17.66	-	-	1,171.53	62	1,153.87
28	MW-17	06/13/97	22.79	-		1,171.53	62	1,148.74
28	MW-17	09/09/97	19.35	-	-	1,171.53	62	1,152.18
28	MW-17	01/29/98	20.47	-	-	1,171.53	62	1,151.06
28	MW-17	04/22/98	18.10	-	-	1,171.53	62	1,153.43
28	MW-17	05/20/98	19.03	-	-	1,171.53	62	1,152.50
28	MW-17	05/21/98	20.66	-	-	1,171.53	62	1,150.87
28	MW-17	06/13/98	19.98	-	-	1,171.53	62	1,151.55
28	MW-17	08/20/98	21.02	-	-	1,171.53	62	1,150.51
28	MW-17	09/08/98	22.28	-	-	1,171.53	62	1,149.25
28	MW-17*	12/23/98	22.11	-	-	1,171.53	62	1,149.42
28	MW-17	12/23/98	22.17	-	-	1,171.53	62	1,149.36
28	MW-17	12/30/98	22.50	-	-	1,171.53	62	1,149.03
28	MW-17	01/25/99	22.80	-	-	1,171.53	62	1,148.73
28	MW-17	02/18/99	23.28	-	-	1,171.53	62	1,148.25
28	MW-17	03/17/99	22.92	-	-	1,171.53	62	1,148.61
28	MW-17	03/18/99	22.87	-	-	1,171.53	62	1,148.66
28	MW-17	04/22/99	20.40	-	-	1,171.53	62	1,151.13
28	MW-17	04/28/99	21.43	-	-	1,171.53	62	1,150.10
28	MW-17	05/21/99	20.34	-	-	1,171.53	62	1,151.19
28	MW-17	06/24/99	20.30	-	-	1,171.53	62	1,151.23
28	MW-17	07/19/99	21.08	-	-	1,171.53	62	1,150.45
28	MW-17	08/23/99	21.71	-	-	1,171.53	62	1,149.82
28	MW-17	09/22/99	18.17	-	-	1,171.53	62	1,153.36
28	MW-17	10/25/99	22.13	-	-	1,171.53	62	1,149.40
28	MW-17	11/24/99	22.52	-	-	1,171.53	62	1,149.01
28	MW-17	12/09/99	22.22	-	-	1,171.53	62	1,149.31
28	MW-17	01/13/00	22.68	-	-	1,171.53	62	1,148.85
28	MW-17	02/17/00	22.83	-	-	1,171.53	62	1,148.70

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
28	MW-17	04/20/00	23.44	-	-	1,171.53	62	1,148.09
28	MW-17	05/23/00	23.16	-	-	1,171.53	62	1,148.37
28	MW-17	06/17/00	23.40	-	-	1,171.53	62	1,148.13
28	MW-17	07/27/00	22.82	-	-	1,171.53	62	1,148.71
28	MW-17	08/16/00	23.89	-	-	1,171.53	62	1,147.64
28	MW-17	09/12/00	20.84	-	-	1,171.53	62	1,150.69
28	MW-17	10/20/00	23.75	-	-	1,171.53	62	1,147.78
28	MW-17	12/13/00	24.11	-	-	1,171.53	62	1,147.42
28	MW-17	01/16/01	23.27	-	-	1,171.53	62	1,148.26
28	MW-17	02/15/01	24.80	-	-	1,171.53	62	1,146.73
28	MW-17	04/12/01	21.94	-	-	1,171.53	62	1,149.59
28	MW-17	05/11/01	19.86	-	-	1,171.53	62	1,151.67
28	MW-17	06/22/01	20.95	-	-	1,171.53	62	1,150.58
28	MW-17	07/30/01	20.46	-	-	1,171.53	62	1,151.07
28	MW-17	08/13/01	21.63	-	-	1,171.53	62	1,149.90
28	MW-17	09/11/01	20.91	-	-	1,171.53	62	1,150.62
28	MW-17	10/09/01	20.81	-	-	1,171.53	62	1,150.72
28	MW-17	11/19/01	22.46	-	-	1,171.53	62	1,149.07
28	MW-17	12/03/01	21.98	-	-	1,171.53	62	1,149.55
28	MW-17	01/29/02	23.15	-	-	1,171.53	62	1,148.38
28	MW-17	02/08/02	23.51	-	-	1,171.53	62	1,148.02
28	MW-17	03/19/02	24.21	-	-	1,171.53	62	1,147.32
28	MW-17	04/16/02	21.86	-	-	1,171.53	62	1,149.67
28	MW-17	05/23/02	21.53	-	-	1,171.53	62	1,150.00
28	MW-17	06/07/02	21.87	-	-	1,171.53	62	1,149.66
28	MW-17	08/19/02	19.10	-	-	1,171.53	62	1,152.43
28	MW-17	11/05/02	15.34	-	-	1,171.53	62	1,156.19
28	MW-17	01/16/03	19.75	-	-	1,171.53	62	1,151.78
28	MW-17	04/03/03	20.70	-	-	1,171.53	62	1,150.83
28	MW-17	07/24/03	19.63	-	-	1,171.53	62	1,151.90
28	MW-17	10/24/03	20.83	-	-	1,171.53	62	1,150.70
28	MW-17	02/04/04	21.83	-	-	1,171.53	62	1,149.70
28	MW-17	04/07/04	21.76	-	-	1,171.53	62	1,149.77
28	MW-17	08/24/04	20.85	-	-	1,171.53	62	1,150.68
28	MW-17	02/16/05	21.36	-	-	1,171.53	62	1,150.17
28	MW-17	11/02/05	18.21	-	-	1,171.53	62	1,153.32
28	MW-17	05/04/06	16.89	-	-	1,171.53	62	1,154.64
28	MW-17	11/29/06	20.71	-	-	1,171.53	62	1,150.82
28	MW-17	03/20/07	20.92	-	-	1,171.53	62	1,150.61
28	MW-17	09/24/07	20.87	-	-	1,171.53	62	1,150.66
28	MW-17	02/12/08	19.40	-	-	1,171.53	62	1,152.13
28	MW-17	11/10/08	19.65	-	-	1,171.53	62	1,151.88
28	MW-17	02/11/09	20.50	-	-	1,171.53	62	1,151.03
28	MW-17	08/11/09	19.71	-	-	1,171.53	62	1,151.82
28	MW-17	02/03/10	18.03	-	-	1,171.53	62	1,153.50
28	MW-17	10/28/10	18.08	-	-	1,171.53	62	1,153.45
28	MW-17	03/01/11	19.71	-	-	1,171.53	62	1,151.82
29	MW-18	11/10/08	20.68	17.97	2.71	1,172.21	30	1,153.59
29	MW-18	08/11/09	20.44	17.11	3.33	1,172.21	30	1,154.30
29	MW-18	02/03/10	20.70	17.35	3.35	1,172.21	30	1,154.06
29	MW-18	10/27/10	19.72	15.59	4.13	1,172.21	30	1,155.63
29	MW-18	11/03/10	17.49	15.76	1.73	1,172.21	30	1,156.03
29	MW-18	03/01/11	18.24	17.99	0.25	1,172.21	30	1,154.16
29	MW-18	04/15/11	16.27	15.59	0.68	1,172.21	31.2	1,156.46
30	MW-19	11/29/06	19.79	-	-	1,172.27	30	1,152.48
30	MW-19	03/20/07	19.01	-	-	1,172.27	30	1,153.26
30	MW-19	09/24/07	18.40	-	-	1,172.27	30	1,153.87
30	MW-19	02/12/08	18.50	-	-	1,172.27	30	1,153.77
30	MW-19	11/10/08	17.02	-	-	1,172.27	30	1,155.25
30	MW-19	02/11/09	18.75	-	-	1,172.27	30	1,153.52
30	MW-19	08/11/09	17.06	-	-	1,172.27	30	1,155.21
30	MW-19	02/03/10	16.10	-	-	1,172.27	30	1,156.17

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
30	MW-19	10/27/10	15.72	-	-	1,172.27	30	1,156.55
30	MW-19	11/03/10	15.32	-	-	1,172.27	30	1,156.95
30	MW-19	03/01/11	17.09	-	-	1,172.27	30	1,155.18
30	MW-19	04/15/11	14.39	-	-	1,172.27	27.9	1,157.88
31	MW-20	11/29/06	19.35	19.34	0.01	1,173.51	25	1,154.17
31	MW-20	03/20/07	21.46	19.95	1.51	1,173.51	25	1,153.20
31	MW-20	09/24/07	19.25	-	-	1,173.51	25	1,154.26
31	MW-20	02/12/08	21.20	19.14	2.06	1,173.51	25	1,153.88
31	MW-20	11/10/08	19.29	18.40	0.89	1,173.51	25	1,154.90
31	MW-20	02/11/09	21.67	19.26	2.41	1,173.51	25	1,153.67
31	MW-20	08/11/09	21.02	17.53	3.49	1,173.51	25	1,155.14
31	MW-20	02/03/10	20.69	16.55	4.14	1,173.51	25	1,155.97
31	MW-20	Abandoned						
32	RW-1	11/29/06	18.12	-	-	1,172.48	39	1,154.36
32	RW-1	03/20/07	19.22	-	-	1,172.48	39	1,153.26
32	RW-1	09/24/07	18.54	-	-	1,172.48	39	1,153.94
32	RW-1	02/12/08	18.45	-	-	1,172.48	39	1,154.03
32	RW-1	11/10/08	17.21	-	-	1,172.48	39	1,155.27
32	RW-1	02/11/09	18.71	-	-	1,172.48	39	1,153.77
32	RW-1	08/11/09	16.91	-	-	1,172.48	39	1,155.57
32	RW-1	02/03/10	16.45	-	-	1,172.48	39	1,156.03
32	RW-1	Abandoned						
33	MW-1	04/22/98	13.66	-	-	1,169.35	-	1,155.69
33	MW-1	05/20/98	13.30	-	-	1,169.35	-	1,156.05
33	MW-1	05/21/98	13.44	-	-	1,169.35	-	1,155.91
33	MW-1	08/20/98	14.43	-	-	1,169.35	-	1,154.92
33	MW-1	Abandoned						
34	MW-2	04/22/98	14.02	-	-	1,169.75	-	1,155.73
34	MW-2	05/20/98	13.83	-	-	1,169.75	-	1,155.92
34	MW-2	05/21/98	13.94	-	-	1,169.75	-	1,155.81
34	MW-2	Abandoned		-	-			
35	MW-3	04/22/98	13.74	-	-	1,169.60	-	1,155.86
35	MW-3	05/20/98	13.61	-	-	1,169.60	-	1,155.99
35	MW-3	05/21/98	13.76	-	-	1,169.60	-	1,155.84
35	MW-3	Abandoned						
40	MW-5	05/20/98	19.10	-	-	1,173.40		1,154.30
40	MW-5	05/21/98	18.76	-	-	1,173.40		1,154.64
40	MW-5	08/20/98	20.43	-	-	1,173.40		1,152.97
41	MW-6	05/21/98	9.97	-	-	1,170.81		1,160.84
42	CMW-42	04/22/98	29.54	-	-	1,168.67	95	1,139.13
42	CMW-42	05/21/98	30.62	-	-	1,168.67	95	1,138.05
42	CMW-42	08/20/98	21.82	-	-	1,168.67	95	1,146.85
42	CMW-42	03/17/99	32.12	-	-	1,168.67	95	1,136.55
42	CMW-42	04/22/99	23.18	-	-	1,168.67	95	1,145.49
42	CMW-42	04/28/99	23.90	-	-	1,168.67	95	1,144.77
42	CMW-42	05/21/99	30.99	-	-	1,168.67	95	1,137.68
42	CMW-42	07/19/99	31.93	-	-	1,168.67	95	1,136.74
42	CMW-42	08/23/99	27.82	-	-	1,168.67	95	1,140.85
42	CMW-42	09/22/99	26.28	-	-	1,168.67	95	1,142.39
42	CMW-42	10/25/99	24.51	-	-	1,168.67	95	1,144.16
42	CMW-42	11/24/99	32.02	-	-	1,168.67	95	1,136.65
42	CMW-42	12/09/99	25.80	-	-	1,168.67	95	1,142.87
42	CMW-42	01/13/00	24.30	-	-	1,168.67	95	1,144.37
42	CMW-42	02/17/00	32.05	-	-	1,168.67	95	1,136.62
42	CMW-42	04/20/00	29.02	-	-	1,168.67	95	1,139.65
42	CMW-42	05/23/00	30.87	-	-	1,168.67	95	1,137.80

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
42	CMW-42	06/17/00	33.00	-	-	1,168.67	95	1,135.67
42	CMW-42	07/27/00	29.05	-	-	1,168.67	95	1,139.62
42	CMW-42	08/16/00	35.70	-	-	1,168.67	95	1,132.97
42	CMW-42	09/12/00	34.65	-	-	1,168.67	95	1,134.02
42	CMW-42	10/20/00	34.38	-	-	1,168.67	95	1,134.29
42	CMW-42	12/13/00	35.10	-	-	1,168.67	95	1,133.57
42	CMW-42	01/16/01	25.08	-	-	1,168.67	95	1,143.59
42	CMW-42	02/15/01	34.79	-	-	1,168.67	95	1,133.88
42	CMW-42	03/08/01	31.92	-	-	1,168.67	95	1,136.75
42	CMW-42	04/12/01	31.27	-	-	1,168.67	95	1,137.40
42	CMW-42	05/11/01	28.01	-	-	1,168.67	95	1,140.66
42	CMW-42	06/22/01	27.41	-	-	1,168.67	95	1,141.26
42	CMW-42	07/30/01	24.58	-	-	1,168.67	95	1,144.09
42	CMW-42	08/13/01	25.37	-	-	1,168.67	95	1,143.30
42	CMW-42	09/11/01	31.65	-	-	1,168.67	95	1,137.02
42	CMW-42	10/09/01	23.42	-	-	1,168.67	95	1,145.25
42	CMW-42	11/19/01	25.91	-	-	1,168.67	95	1,142.76
42	CMW-42	01/29/02	23.98	-	-	1,168.67	95	1,144.69
42	CMW-42	02/08/02	25.76	-	-	1,168.67	95	1,142.91
42	CMW-42	04/16/02	23.85	-	-	1,168.67	95	1,144.82
42	CMW-42	05/23/02	24.66	-	-	1,168.67	95	1,144.01
42	CMW-42	06/07/02	23.19	-	-	1,168.67	95	1,145.48
42	CMW-42	08/19/02	21.79	-	-	1,168.67	95	1,146.88
42	CMW-42	11/05/02	19.70	-	-	1,168.67	95	1,148.97
42	CMW-42	01/16/03	23.45	-	-	1,168.67	95	1,145.22
42	CMW-42	04/03/03	22.30	-	-	1,168.67	95	1,146.37
42	CMW-42	07/24/03	20.22	-	-	1,168.67	95	1,148.45
42	CMW-42	10/24/03	21.11	-	-	1,168.67	95	1,147.56
42	CMW-42	02/04/04	23.63	-	-	1,168.67	95	1,145.04
42	CMW-42	04/07/04	24.42	-	-	1,168.67	95	1,144.25
42	CMW-42	08/24/04	24.16	-	-	1,168.67	95	1,144.51
42	CMW-42	02/16/05	22.47	-	-	1,168.67	95	1,146.20
42	CMW-42	11/02/05	19.34	-	-	1,168.67	95	1,149.33
42	CMW-42	05/04/06	19.80	-	-	1,168.67	95	1,148.87
42	CMW-42	11/29/06	23.85	-	-	1,168.67	95	1,144.82
42	CMW-42	03/20/07	21.54	-	-	1,168.67	95	1,147.13
42	CMW-42	09/24/07	23.54	-	-	1,168.67	95	1,145.13
42	CMW-42	02/12/08	21.38	-	-	1,168.67	95	1,147.29
42	CMW-42	11/10/08	20.68	-	-	1,168.67	95	1,147.99
42	CMW-42	02/11/09	24.66	-	-	1,168.67	95	1,144.01
42	CMW-42	08/11/09	20.53	-	-	1,168.67	95	1,148.14
42	CMW-42	02/03/10	19.11	-	-	1,168.67	95	1,149.56
42	CMW-42	10/28/10	19.21	-	-	1,168.67	95	1,149.46
42	CMW-42	03/01/11	19.65	-	-	1,168.67	95	1,149.02
43	CMW-43	04/22/98	27.37	-	-	1,167.91	95	1,140.54
43	CMW-43	05/21/98	28.55	-	-	1,167.91	95	1,139.36
43	CMW-43	08/20/98	20.82	-	-	1,167.91	95	1,147.09
43	CMW-43	03/17/99	30.14	-	-	1,167.91	95	1,137.77
43	CMW-43	04/22/99	22.35	-	-	1,167.91	95	1,145.56
43	CMW-43	04/28/99	23.06	-	-	1,167.91	95	1,144.85
43	CMW-43	05/21/99	28.99	-	-	1,167.91	95	1,138.92
43	CMW-43	07/19/99	29.94	-	-	1,167.91	95	1,137.97
43	CMW-43	08/23/99	25.41	-	-	1,167.91	95	1,142.50
43	CMW-43	09/22/99	23.87	-	-	1,167.91	95	1,144.04
43	CMW-43	10/25/99	23.75	-	-	1,167.91	95	1,144.16
43	CMW-43	11/24/99	29.37	-	-	1,167.91	95	1,138.54
43	CMW-43	12/09/99	24.88	-	-	1,167.91	95	1,143.03
43	CMW-43	01/13/00	23.51	-	-	1,167.91	95	1,144.40
43	CMW-43	02/17/00	29.82	-	-	1,167.91	95	1,138.09
43	CMW-43	04/20/00	27.73	-	-	1,167.91	95	1,140.18
43	CMW-43	05/23/00	29.07	-	-	1,167.91	95	1,138.84
43	CMW-43	06/17/00	31.60	-	-	1,167.91	95	1,136.31
43	CMW-43	07/27/00	31.40	-	-	1,167.91	95	1,136.51

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
43	CMW-43	08/16/00	34.64	-	-	1,167.91	95	1,133.27
43	CMW-43	09/12/00	32.55	-	-	1,167.91	95	1,135.36
43	CMW-43	10/20/00	32.22	-	-	1,167.91	95	1,135.69
43	CMW-43	12/13/00	33.11	-	-	1,167.91	95	1,134.80
43	CMW-43	01/16/01	26.58	-	-	1,167.91	95	1,141.33
43	CMW-43	02/15/01	32.97	-	-	1,167.91	95	1,134.94
43	CMW-43	03/08/01	30.95	-	-	1,167.91	95	1,136.96
43	CMW-43	04/12/01	29.68	-	-	1,167.91	95	1,138.23
43	CMW-43	05/11/01	26.54	-	-	1,167.91	95	1,141.37
43	CMW-43	06/22/01	26.66	-	-	1,167.91	95	1,141.25
43	CMW-43	07/30/01	23.70	-	-	1,167.91	95	1,144.21
43	CMW-43	08/13/01	24.46	-	-	1,167.91	95	1,143.45
43	CMW-43	09/11/01	29.91	-	-	1,167.91	95	1,138.00
43	CMW-43	10/09/01	22.59	-	-	1,167.91	95	1,145.32
43	CMW-43	11/19/01	25.03	-	-	1,167.91	95	1,142.88
43	CMW-43	01/29/02	23.15	-	-	1,167.91	95	1,144.76
43	CMW-43	02/08/02	24.43	-	-	1,167.91	95	1,143.48
43	CMW-43	03/19/02	-	-	-	1,167.91	95	-
43	CMW-43	04/16/02	22.90	-	-	1,167.91	95	1,145.01
43	CMW-43	05/23/02	26.35	-	-	1,167.91	95	1,141.56
43	CMW-43	06/07/02	22.50	-	-	1,167.91	95	1,145.41
43	CMW-43	08/19/02	20.89	-	-	1,167.91	95	1,147.02
43	CMW-43	11/05/02	18.89	-	-	1,167.91	95	1,149.02
43	CMW-43	01/16/03	22.55	-	-	1,167.91	95	1,145.36
43	CMW-43	04/03/03	23.04	-	-	1,167.91	95	1,144.87
43	CMW-43	07/24/03	19.40	-	-	1,167.91	95	1,148.51
43	CMW-43	10/24/03	20.34	-	-	1,167.91	95	1,147.57
43	CMW-43	02/04/04	23.02	-	-	1,167.91	95	1,144.89
43	CMW-43	04/07/04	23.63	-	-	1,167.91	95	1,144.28
43	CMW-43	08/24/04	23.29	-	-	1,167.91	95	1,144.62
43	CMW-43	02/16/05	21.66	-	-	1,167.91	95	1,146.25
43	CMW-43	11/02/05	18.54	-	-	1,167.91	95	1,149.37
43	CMW-43	05/04/06	18.95	-	-	1,167.91	95	1,148.96
43	CMW-43	11/29/06	23.00	-	-	1,167.91	95	1,144.91
43	CMW-43	03/20/07	20.74	-	-	1,167.91	95	1,147.17
43	CMW-43	09/24/07	22.02	-	-	1,167.91	95	1,145.89
43	CMW-43	02/12/08	20.57	-	-	1,167.91	95	1,147.34
43	CMW-43	11/10/08	19.89	-	-	1,167.91	95	1,148.02
43	CMW-43	02/11/09	22.02	-	-	1,167.91	95	1,145.89
43	CMW-43	08/11/09	19.78	-	-	1,167.91	95	1,148.13
43	CMW-43	02/03/10	18.32	-	-	1,167.91	95	1,149.59
43	CMW-43	10/28/10	18.21	-	-	1,167.91	95	1,149.70
43	CMW-43	03/01/11	18.78	-	-	1,167.91	95	1,149.13
44	MW-4	04/22/98	14.82	-	-	1,170.58	19	1,155.76
44	MW-4	05/20/98	14.72	-	-	1,170.58	19	1,155.86
44	MW-4	05/21/98	14.89	-	-	1,170.58	19	1,155.69
44	MW-4*	12/23/98	17.86	-	-	1,170.58	19	1,152.72
44	MW-4	12/23/98	17.67	-	-	1,170.58	19	1,152.91
44	MW-4	12/30/98	17.79	-	-	1,170.58	19	1,152.79
44	MW-4	01/25/99	18.28	-	-	1,170.58	19	1,152.30
44	MW-4	02/18/99	18.60	-	-	1,170.58	19	1,151.98
44	MW-4	03/17/99	DRY	-	-	1,170.58	19	-
44	MW-4	03/18/99	DRY	-	-	1,170.58	19	-
44	MW-4	04/22/99	18.13	-	-	1,170.58	19	1,152.45
44	MW-4	05/21/99	17.09	-	-	1,170.58	19	1,153.49
44	MW-4	07/19/99	16.24	-	-	1,170.58	19	1,154.34
44	MW-4	08/23/99	17.06	-	-	1,170.58	19	1,153.52
44	MW-4	10/25/99	17.63	-	-	1,170.58	19	1,152.95
44	MW-4	11/24/99	18.29	-	-	1,170.58	19	1,152.29
44	MW-4	12/09/99	18.52	-	-	1,170.58	19	1,152.06
44	MW-4	02/17/00	12.80	-	-	1,170.58	19	1,157.78
44	MW-4	12/13/00	19.22	-	-	1,170.58	19	1,151.36
44	MW-4	04/12/01	DRY	-	-	1,170.58	19	-

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
44	MW-4	07/30/01	16.60	-	-	1,170.58	19	1,153.98
44	MW-4	08/13/01	17.04	-	-	1,170.58	19	1,153.54
44	MW-4	09/11/01	17.42	-	-	1,170.58	19	1,153.16
44	MW-4	10/09/01	17.89	-	-	1,170.58	19	1,152.69
44	MW-4	01/29/02	DRY	-	-	1,170.58	19	-
44	MW-4	03/19/02	DRY	-	-	1,170.58	19	-
44	MW-4	04/16/02	DRY	-	-	1,170.58	19	-
44	MW-4	05/23/02	18.41	-	-	1,170.58	19	1,152.17
44	MW-4	06/07/02	18.18	-	-	1,170.58	19	1,152.40
44	MW-4	08/19/02	16.16	-	-	1,170.58	19	1,154.42
44	MW-4	11/05/02	14.61	-	-	1,170.58	19	1,155.97
44	MW-4	01/16/03	16.15	-	-	1,170.58	19	1,154.43
44	MW-4	04/03/03	17.45	-	-	1,170.58	19	1,153.13
44	MW-4	07/24/03	15.72	-	-	1,170.58	19	1,154.86
44	MW-4	10/24/03	17.37	-	-	1,170.58	19	1,153.21
44	MW-4	02/04/04	-	-	-	1,170.58	19	-
44	MW-4	04/07/04	20.85	-	-	1,170.58	19	1,149.73
44	MW-4	08/24/04	20.15	-	-	1,170.58	19	1,150.43
44	MW-4	02/16/05	18.18	-	-	1,170.58	19	1,152.40
44	MW-4	11/02/05	14.70	-	-	1,170.58	19	1,155.88
44	MW-4	05/04/06	14.58	-	-	1,170.58	19	1,156.00
44	MW-4	11/29/06	17.55	-	-	1,170.58	19	1,153.03
44	MW-4	03/20/07	18.72	-	-	1,170.58	19	1,151.86
44	MW-4	09/24/07	17.90	-	-	1,170.58	19	1,152.68
44	MW-4	02/12/08	17.39	-	-	1,170.58	19	1,153.19
44	MW-4	02/11/09	-	-	-	1,170.58	19	-
44	MW-4	08/11/09	16.18	-	-	1,170.58	19	1,154.40
44	MW-4	02/03/10	inaccessable	-	-	1,170.58	19	-
44	MW-4	10/28/10	17.24	-	-	1,170.58	19	1,153.34
44	MW-4	03/01/11	16.51	-	-	1,170.58	19	1,154.07
45	DW-5	08/20/98	22.27	-	-	1,172.76	67	1,150.49
45	DW-5*	12/23/98	23.43	-	-	1,172.76	67	1,149.33
45	DW-5	12/23/98	48.46	-	-	1,172.76	67	1,124.30
45	DW-5	12/30/98	50.75	-	-	1,172.76	67	1,122.01
45	DW-5	01/25/99	52.81	-	-	1,172.76	67	1,119.95
45	DW-5	02/18/99	54.60	-	-	1,172.76	67	1,118.16
45	DW-5	03/17/99	57.87	-	-	1,172.76	67	1,114.89
45	DW-5	03/18/99	54.81	-	-	1,172.76	67	1,117.95
45	DW-5	04/22/99	55.44	-	-	1,172.76	67	1,117.32
45	DW-5	05/21/99	53.80	-	-	1,172.76	67	1,118.96
45	DW-5	06/24/99	56.02	-	-	1,172.76	67	1,116.74
45	DW-5	07/19/99	55.91	-	-	1,172.76	67	1,116.85
45	DW-5	08/23/99	57.98	-	-	1,172.76	67	1,114.78
45	DW-5	09/22/99	51.20	-	-	1,172.76	67	1,121.56
45	DW-5	10/25/99	52.62	-	-	1,172.76	67	1,120.14
45	DW-5	11/24/99	54.42	-	-	1,172.76	67	1,118.34
45	DW-5	12/09/99	55.05	-	-	1,172.76	67	1,117.71
45	DW-5	04/20/00	55.45	-	-	1,172.76	67	1,117.31
45	DW-5	05/23/00	41.52	-	-	1,172.76	67	1,131.24
45	DW-5	06/17/00	41.10	-	-	1,172.76	67	1,131.66
45	DW-5	07/27/00	48.00	-	-	1,172.76	67	1,124.76
45	DW-5	08/16/00	58.49	-	-	1,172.76	67	1,114.27
45	DW-5	09/12/00	57.92	-	-	1,172.76	67	1,114.84
45	DW-5	10/20/00	56.00	-	-	1,172.76	67	1,116.76
45	DW-5	12/13/00	52.62	-	-	1,172.76	67	1,120.14
45	DW-5	01/16/01	54.70	-	-	1,172.76	67	1,118.06
45	DW-5	02/15/01	51.59	-	-	1,172.76	67	1,121.17
45	DW-5	03/08/01	47.82	-	-	1,172.76	67	1,124.94
45	DW-5	04/12/01	54.20	-	-	1,172.76	67	1,118.56
45	DW-5	05/11/01	58.00	-	-	1,172.76	67	1,114.76
45	DW-5	06/22/01	58.00	-	-	1,172.76	67	1,114.76
45	DW-5	07/30/01	57.50	-	-	1,172.76	67	1,115.26
45	DW-5	08/13/01	39.00	-	-	1,172.76	67	1,133.76

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
45	DW-5	12/03/01	43.00	-	-	1,172.76	67	1,129.76
45	DW-5	01/29/02	45.00	-	-	1,172.76	67	1,127.76
45	DW-5	02/08/02	51.00	-	-	1,172.76	67	1,121.76
45	DW-5	03/19/02	49.00	-	-	1,172.76	67	1,123.76
45	DW-5	04/16/02	23.00	-	-	1,172.76	67	1,149.76
45	DW-5	05/23/02	22.65	-	-	1,172.76	67	1,150.11
45	DW-5	06/07/02	23.04	-	-	1,172.76	67	1,149.72
45	DW-5	08/19/02	20.39	-	-	1,172.76	67	1,152.37
45	DW-5	11/05/02	19.75	-	-	1,172.76	67	1,153.01
45	DW-5	01/16/03	20.83	-	-	1,172.76	67	1,151.93
45	DW-5	07/24/03	20.82	-	-	1,172.76	67	1,151.94
45	DW-5	10/24/03	21.99	-	-	1,172.76	67	1,150.77
45	DW-5	02/04/04	22.69	-	-	1,172.76	67	1,150.07
45	DW-5	04/07/04	23.05	-	-	1,172.76	67	1,149.71
45	DW-5	08/24/04	21.93	-	-	1,172.76	67	1,150.83
45	DW-5	02/16/05	22.62	-	-	1,172.76	67	1,150.14
45	DW-5	11/02/05	19.46	-	-	1,172.76	67	1,153.30
45	DW-5	05/04/06	18.10	-	-	1,172.76	67	1,154.66
45	DW-5	11/29/06	21.90	-	-	1,172.76	67	1,150.86
45	DW-5	03/20/07	22.14	-	-	1,172.76	67	1,150.62
45	DW-5	09/24/07	22.10	-	-	1,172.76	67	1,150.66
45	DW-5	02/12/08	20.57	-	-	1,172.76	67	1,152.19
45	DW-5	11/10/08	20.92	-	-	1,172.76	67	1,151.84
45	DW-5	02/11/09	21.75	-	-	1,172.76	67	1,151.01
45	DW-5	08/11/09	20.96	-	-	1,172.76	67	1,151.80
45	DW-5	02/03/10	19.25	-	-	1,172.76	67	1,153.51
45	DW-5	10/28/10	19.32	-	-	1,172.76	67	1,153.44
45	DW-5	03/01/11	34.71	-	-	1,172.76	67	1,138.05
46	DW-6	08/20/98	21.28	-	-	1,172.32	45	1,151.04
46	DW-6*	12/23/98	22.34	-	-	1,172.32	45	1,149.98
46	DW-6	12/23/98	22.48	-	-	1,172.32	45	1,149.84
46	DW-6	12/30/98	22.58	-	-	1,172.32	45	1,149.74
46	DW-6	01/25/99	22.88	-	-	1,172.32	45	1,149.44
46	DW-6	02/18/99	23.15	-	-	1,172.32	45	1,149.17
46	DW-6	03/17/99	23.32	-	-	1,172.32	45	1,149.00
46	DW-6	03/18/99	23.20	-	-	1,172.32	45	1,149.12
46	DW-6	04/22/99	21.73	-	-	1,172.32	45	1,150.59
46	DW-6	04/28/99	21.85	-	-	1,172.32	45	1,150.47
46	DW-6	05/21/99	20.78	-	-	1,172.32	45	1,151.54
46	DW-6	06/24/99	20.57	-	-	1,172.32	45	1,151.75
46	DW-6	07/19/99	21.26	-	-	1,172.32	45	1,151.06
46	DW-6	08/23/99	23.41	-	-	1,172.32	45	1,148.91
46	DW-6	09/22/99	21.98	-	-	1,172.32	45	1,150.34
46	DW-6	10/25/99	22.86	-	-	1,172.32	45	1,149.46
46	DW-6	11/24/99	22.80	-	-	1,172.32	45	1,149.52
46	DW-6	12/09/99	22.68	-	-	1,172.32	45	1,149.64
46	DW-6	01/13/00	22.95	-	-	1,172.32	45	1,149.37
46	DW-6	02/17/00	23.32	-	-	1,172.32	45	1,149.00
46	DW-6	04/20/00	23.57	-	-	1,172.32	45	1,148.75
46	DW-6	05/23/00	23.32	-	-	1,172.32	45	1,149.00
46	DW-6	06/17/00	23.64	-	-	1,172.32	45	1,148.68
46	DW-6	07/27/00	23.09	-	-	1,172.32	45	1,149.23
46	DW-6	08/16/00	23.71	-	-	1,172.32	45	1,148.61
46	DW-6	09/12/00	23.51	-	-	1,172.32	45	1,148.81
46	DW-6	10/20/00	24.39	-	-	1,172.32	45	1,147.93
46	DW-6	12/13/00	23.31	-	-	1,172.32	45	1,149.01
46	DW-6	01/16/01	23.78	-	-	1,172.32	45	1,148.54
46	DW-6	02/15/01	25.39	-	-	1,172.32	45	1,146.93
46	DW-6	03/08/01	24.38	-	-	1,172.32	45	1,147.94
46	DW-6	04/12/01	22.38	-	-	1,172.32	45	1,149.94
46	DW-6	05/11/01	20.48	-	-	1,172.32	45	1,151.84
46	DW-6	06/22/01	20.83	-	-	1,172.32	45	1,151.49
46	DW-6	07/30/01	20.83	-	-	1,172.32	45	1,151.49

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
46	DW-6	08/13/01	21.96	-	-	1,172.32	45	1,150.36
46	DW-6	09/11/01	21.53	-	-	1,172.32	45	1,150.79
46	DW-6	10/09/01	21.51	-	-	1,172.32	45	1,150.81
46	DW-6	11/19/01	21.91	-	-	1,172.32	45	1,150.41
46	DW-6	12/03/01	22.43	-	-	1,172.32	45	1,149.89
46	DW-6	01/29/02	23.71	-	-	1,172.32	45	1,148.61
46	DW-6	02/08/02	24.01	-	-	1,172.32	45	1,148.31
46	DW-6	03/19/02	24.51	-	-	1,172.32	45	1,147.81
46	DW-6	04/16/02	22.55	-	-	1,172.32	45	1,149.77
46	DW-6	05/23/02	22.01	-	-	1,172.32	45	1,150.31
46	DW-6	06/07/02	22.17	-	-	1,172.32	45	1,150.15
46	DW-6	08/19/02	19.66	-	-	1,172.32	45	1,152.66
46	DW-6	11/05/02	19.00	-	-	1,172.32	45	1,153.32
46	DW-6	01/16/03	20.28	-	-	1,172.32	45	1,152.04
46	DW-6	04/03/03	21.30	-	-	1,172.32	45	1,151.02
46	DW-6	07/24/03	20.03	-	-	1,172.32	45	1,152.29
46	DW-6	10/24/03	21.37	-	-	1,172.32	45	1,150.95
46	DW-6	02/04/04	22.06	-	-	1,172.32	45	1,150.26
46	DW-6	04/07/04	22.34	-	-	1,172.32	45	1,149.98
46	DW-6	08/24/04	21.23	-	-	1,172.32	45	1,151.09
46	DW-6	02/16/05	21.92	-	-	1,172.32	45	1,150.40
46	DW-6	11/02/05	18.72	-	-	1,172.32	45	1,153.60
46	DW-6	05/04/06	17.61	-	-	1,172.32	45	1,154.71
46	DW-6	11/29/06	21.20	-	-	1,172.32	45	1,151.12
46	DW-6	03/20/07	21.42	-	-	1,172.32	45	1,150.90
46	DW-6	09/24/07	21.49	-	-	1,172.32	45	1,150.83
46	DW-6	02/12/08	20.15	-	-	1,172.32	45	1,152.17
46	DW-6	11/10/08	20.12	-	-	1,172.32	45	1,152.20
46	DW-6	02/11/09	21.18	-	-	1,172.32	45	1,151.14
46	DW-6	08/11/09	20.20	-	-	1,172.32	45	1,152.12
46	DW-6	02/03/10	18.68	-	-	1,172.32	45	1,153.64
46	DW-6	10/28/10	18.64	-	-	1,172.32	45	1,153.68
46	DW-6	03/01/11	20.36	-	-	1,172.32	45	1,151.96
47	TW-1	07/19/99	40.77	-	-	-	102	-
47	TW-1	08/23/99	38.02	-	-	-	102	-
47	TW-1	10/25/99	39.22	-	-	-	102	-
47	TW-1	11/24/99	39.56	-	-	-	102	-
47	TW-1	12/09/99	40.50	-	-	-	102	-
47	TW-1	04/20/00	38.36	-	-	-	102	-
47	TW-1	05/23/00	41.16	-	-	-	102	-
47	TW-1	06/17/00	41.70	-	-	-	102	-
47	TW-1	07/27/00	39.77	-	-	-	102	-
47	TW-1	08/16/00	46.70	-	-	-	102	-
47	TW-1	Abandoned						
48	DW-7S	05/10/01	18.87	-	-	1,171.78	35	1,152.91
48	DW-7S	07/30/01	18.43	-	-	1,171.78	35	1,153.35
48	DW-7S	08/13/01	18.92	-	-	1,171.78	35	1,152.86
48	DW-7S	09/11/01	19.02	-	-	1,171.78	35	1,152.76
48	DW-7S	10/09/01	19.30	-	-	1,171.78	35	1,152.48
48	DW-7S	11/19/01	19.68	-	-	1,171.78	35	1,152.10
48	DW-7S	12/03/01	19.60	-	-	1,171.78	35	1,152.18
48	DW-7S	01/29/02	20.16	-	-	1,171.78	35	1,151.62
48	DW-7S	02/08/02	20.31	-	-	1,171.78	35	1,151.47
48	DW-7S	03/19/01	20.69	-	-	1,171.78	35	1,151.09
48	DW-7S	04/16/02	19.36	-	-	1,171.78	35	1,152.42
48	DW-7S	05/23/02	18.83	-	-	1,171.78	35	1,152.95
48	DW-7S	06/07/02	18.83	-	-	1,171.78	35	1,152.95
48	DW-7S	08/19/02	17.01	-	-	1,171.78	35	1,154.77
48	DW-7S	11/05/02	15.67	-	-	1,171.78	35	1,156.11
48	DW-7S	01/16/03	16.85	-	-	1,171.78	35	1,154.93
48	DW-7S	04/03/03	17.85	-	-	1,171.78	35	1,153.93
48	DW-7S	07/24/03	16.69	-	-	1,171.78	35	1,155.09

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
48	DW-7S	10/24/03	18.23	-	-	1,171.78	35	1,153.55
48	DW-7S	02/04/04	19.45	-	-	1,171.78	35	1,152.33
48	DW-7S	04/07/04	19.52	-	-	1,171.78	35	1,152.26
48	DW-7S	08/24/04	18.52	-	-	1,171.78	35	1,153.26
48	DW-7S	02/16/05	18.98	-	-	1,171.78	35	1,152.80
48	DW-7S	11/02/05	16.50	-	-	1,171.78	35	1,155.28
48	DW-7S	05/04/06	15.78	-	-	1,171.78	35	1,156.00
48	DW-7S	11/29/06	18.38	-	-	1,171.78	35	1,153.40
48	DW-7S	03/20/07	18.32	-	-	1,171.78	35	1,153.46
48	DW-7S	09/24/07	18.82	-	-	1,171.78	35	1,152.96
48	DW-7S	02/12/08	18.70	-	-	1,171.78	35	1,153.08
48	DW-7S	11/10/08	18.01	-	-	1,171.78	35	1,153.77
48	DW-7S	02/11/09	18.69	-	-	1,171.78	35	1,153.09
48	DW-7S	08/11/09	17.33	-	-	1,171.78	35	1,154.45
48	DW-7S	02/03/10	16.51	-	-	1,171.78	35	1,155.27
48	DW-7S	10/28/10	15.81	-	-	1,171.78	35	1,155.97
48	DW-7S	03/01/11	17.21	-	-	1,171.78	35	1,154.57
49	DW-7D	05/10/01	20.20	-	-	1,171.75	95	1,151.55
49	DW-7D	07/30/01	21.70	-	-	1,171.75	95	1,150.05
49	DW-7D	08/13/01	22.07	-	-	1,171.75	95	1,149.68
49	DW-7D	09/11/01	22.42	-	-	1,171.75	95	1,149.33
49	DW-7D	10/09/01	21.51	-	-	1,171.75	95	1,150.24
49	DW-7D	11/19/01	21.51	-	-	1,171.75	95	1,150.24
49	DW-7D	12/03/01	22.05	-	-	1,171.75	95	1,149.70
49	DW-7D	01/29/02	23.27	-	-	1,171.75	95	1,148.48
49	DW-7D	02/08/02	23.77	-	-	1,171.75	95	1,147.98
49	DW-7D	03/19/02	23.96	-	-	1,171.75	95	1,147.79
49	DW-7D	04/16/02	22.30	-	-	1,171.75	95	1,149.45
49	DW-7D	05/23/02	21.92	-	-	1,171.75	95	1,149.83
49	DW-7D	06/07/02	21.61	-	-	1,171.75	95	1,150.14
49	DW-7D	08/19/02	19.61	-	-	1,171.75	95	1,152.14
49	DW-7D	11/05/02	19.02	-	-	1,171.75	95	1,152.73
49	DW-7D	01/16/03	19.72	-	-	1,171.75	95	1,152.03
49	DW-7D	04/03/03	20.94	-	-	1,171.75	95	1,150.81
49	DW-7D	07/24/03	19.79	-	-	1,171.75	95	1,151.96
49	DW-7D	10/24/03	22.03	-	-	1,171.75	95	1,149.72
49	DW-7D	02/04/04	21.57	-	-	1,171.75	95	1,150.18
49	DW-7D	04/07/04	22.03	-	-	1,171.75	95	1,149.72
49	DW-7D	08/24/04	20.89	-	-	1,171.75	95	1,150.86
49	DW-7D	02/16/05	21.58	-	-	1,171.75	95	1,150.17
49	DW-7D	11/02/05	15.69	-	-	1,171.75	95	1,156.06
49	DW-7D	05/04/06	17.80	-	-	1,171.75	95	1,153.95
49	DW-7D	11/29/06	21.12	-	-	1,171.75	95	1,150.63
49	DW-7D	03/20/07	20.91	-	-	1,171.75	95	1,150.84
49	DW-7D	09/24/07	21.11	-	-	1,171.75	95	1,150.64
49	DW-7D	02/12/08	20.38	-	-	1,171.75	95	1,151.37
49	DW-7D	11/10/08	19.94	-	-	1,171.75	95	1,151.81
49	DW-7D	02/11/09	21.05	-	-	1,171.75	95	1,150.70
49	DW-7D	08/11/09	19.86	-	-	1,171.75	95	1,151.89
49	DW-7D	02/03/10	18.79	-	-	1,171.75	95	1,152.96
49	DW-7D	10/28/10	18.21	-	-	1,171.75	95	1,153.54
49	DW-7D	03/01/11	19.76	-	-	1,171.75	95	1,151.99
50	MW-21	11/29/06	19.45	19.35	0.10	1,174.21	32	1,154.84
50	MW-21	03/20/07	19.85	19.71	0.14	1,174.21	32	1,154.47
50	MW-21	09/24/07	19.47	19.40	0.07	1,174.21	32	1,154.79
50	MW-21	02/12/08	19.36	19.28	0.08	1,174.21	32	1,154.91
50	MW-21	11/10/08	18.21	-	-	1,174.21	32	1,156.00
50	MW-21	02/11/09	19.19	-	-	1,174.21	32	1,155.02
50	MW-21	08/11/09	17.62	17.54	0.08	1,174.21	32	1,156.65
50	MW-21	02/03/10	17.52	17.29	0.23	1,174.21	32	1,156.86
50	MW-21	Abandoned						

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
51	MW-22	11/29/06	20.30	19.83	0.47	1,174.07	32	1,154.13
51	MW-22	03/20/07	21.30	20.85	0.45	1,174.07	32	1,153.11
51	MW-22	09/24/07	20.69	20.22	0.47	1,174.07	32	1,153.74
51	MW-22	02/12/08	20.62	20.15	0.47	1,174.07	32	1,153.81
51	MW-22	02/11/09	20.89	20.41	0.48	1,174.07	32	1,153.54
51	MW-22	08/11/09	19.05	18.66	0.39	1,174.07	32	1,155.32
51	MW-22	02/03/10	18.78	18.43	0.35	1,174.07	32	1,155.56
51	MW-22	Abandoned						
52	MW-23	11/29/06	19.70	-	-	1,173.79	31.6	1,154.09
52	MW-23	03/20/07	20.67	-	-	1,173.79	31.6	1,153.12
52	MW-23	09/24/07	20.12	-	-	1,173.79	31.6	1,153.67
52	MW-23	02/12/08	19.96	-	-	1,173.79	31.6	1,153.83
52	MW-23	11/10/08	19.40	-	-	1,173.79	31.6	1,154.39
52	MW-23	02/11/09	20.25	-	-	1,173.79	31.6	1,153.54
52	MW-23	08/11/09	18.71	18.70	0.01	1,173.79	31.6	1,155.09
52	MW-23	02/03/10	17.89	-	-	1,173.79	31.6	1,155.90
52	MW-23	Abandoned						
53	MW-24	11/29/06	21.75	19.44	2.31	1,174.17	32.3	1,154.18
53	MW-24	03/20/07	22.56	20.43	2.13	1,174.17	32.3	1,153.23
53	MW-24	09/24/07	22.55	19.71	2.84	1,174.17	32.3	1,153.78
53	MW-24	02/12/08	22.42	19.60	2.82	1,174.17	32.3	1,153.89
53	MW-24	11/10/08	22.35	18.86	3.49	1,174.17	32.3	1,154.47
53	MW-24	02/11/09	23.07	19.75	3.32	1,174.17	32.3	1,153.62
53	MW-24	08/11/09	21.74	18.15	3.59	1,174.17	32.3	1,155.16
53	MW-24	02/03/10	21.25	17.22	4.03	1,174.17	32.3	1,155.98
53	MW-24	Abandoned						
54	MW-25	11/29/06	20.85	19.00	1.85	1,173.58	31.5	1,154.14
54	MW-25	03/20/07	21.20	20.15	1.05	1,173.58	31.5	1,153.18
54	MW-25	09/24/07	21.08	19.50	1.58	1,173.58	31.5	1,153.70
54	MW-25	02/12/08	21.07	19.28	1.79	1,173.58	31.5	1,153.87
54	MW-25	11/10/08	20.95	18.56	2.39	1,173.58	31.5	1,154.45
54	MW-25	02/11/09	21.44	19.54	1.90	1,173.58	31.5	1,153.58
54	MW-25	08/11/09	21.18	17.82	3.36	1,173.58	31.5	1,154.95
54	MW-25	02/03/10	20.79	16.62	4.17	1,173.58	31.5	1,155.96
54	MW-25	Abandoned						
	MW-26	10/27/10	16.67	16.36	0.31	1,172.23	30.5	1,155.80
	MW-26	11/03/10	16.21	16.20	0.01	1,172.23	30.5	1,156.03
	MW-26	03/01/11	17.99	-	-	1,172.23	30.5	1,154.24
	MW-26	04/15/11	15.75	-	-	1,172.23	30.5	1,156.48
	MW-27	10/27/10	16.37	-	-	1,172.15	31.3	1,155.78
	MW-27	11/03/10	16.14	-	-	1,172.15	31.3	1,156.01
	MW-27	03/01/11	17.91	-	-	1,172.15	31.3	1,154.24
	MW-27	04/15/11	15.70	-	-	1,172.15	31.3	1,156.45
	MW-28	10/27/10	14.98	-	-	1,170.92	29.4	1,155.94
	MW-28	11/03/10	14.88	-	-	1,170.92	29.4	1,156.04
	MW-28	03/02/11	16.49	-	-	1,170.92	29.4	1,154.43
	MW-28	04/15/11	14.69	-	-	1,170.92	29.4	1,156.23
	MW-29	10/27/10	14.87	-	-	1,171.23	29.8	1,156.36
	MW-29	11/03/10	15.09	-	-	1,171.23	29.8	1,156.14
	MW-29	03/01/11	16.81	-	-	1,171.23	29.8	1,154.42
	MW-29	04/15/11	14.73	-	-	1,171.23	29.8	1,156.50
	MW-30	10/27/10	16.75	-	-	1,172.62	31.0	1,155.87
	MW-30	11/03/10	16.51	16.50	0.01	1,172.62	31.0	1,156.11
	MW-30	03/01/11	18.26	-	-	1,172.62	31.0	1,154.36
	MW-30	04/15/11	16.04	-	-	1,172.62	31.0	1,156.58

TABLE 10 - GROUNDWATER ELEVATION DATA
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID #:	Well	Date	Depth to Water (ft btoc)	Depth to LNAPL (ft btoc)	LNAPL Thickness (ft)	Reference Elevation (ft amsl)	Well Depth (ft btoc)	Water Table Elevation** (ft amsl)
	DPE-1	03/01/11	19.07	-	-	1,172.71	34.4	1,153.64
	DPE-1	04/15/11	16.89	-	-	1,172.71	34.4	1,155.82
	DPE-2	03/01/11	18.42	-	-	1,173.45	34.2	1,155.03
	DPE-2	04/15/11	16.26	-	-	1,173.45	34.2	1,157.19
55	DW-8	05/03/07	21.71	-	-	1,174.35	92	1,152.64
55	DW-8	09/24/07	23.73	-	-	1,174.35	92	1,150.62
55	DW-8	02/12/08	22.54	-	-	1,174.35	92	1,151.81
55	DW-8	11/10/08	22.26	-	-	1,174.35	92	1,152.09
55	DW-8	02/11/09	23.32	-	-	1,174.35	92	1,151.03
55	DW-8	08/11/09	22.47	-	-	1,174.35	92	1,151.88
55	DW-8	02/03/10	20.94	-	-	1,174.35	92	1,153.41
55	DW-8	10/28/10	20.61	-	-	1,174.35	92	1,153.74
55	DW-8	03/01/11	22.31	-	-	1,174.35	92	1,152.04
57	DW-8S	02/11/09	22.72	-	-	1,174.71	35	1,151.99
57	DW-8S	08/11/09	21.12	-	-	1,174.71	35	1,153.59
57	DW-8S	02/03/10	20.29	-	-	1,174.71	35	1,154.42
57	DW-8S	10/28/10	19.82	-	-	1,174.71	35	1,154.89
57	DW-8S	03/01/11	21.28	-	-	1,174.71	35	1,153.43
56	DW-9	05/03/07	20.52	-	-	1,174.96	33.5	1,154.44
56	DW-9	09/24/07	22.20	-	-	1,174.96	33.5	1,152.76
56	DW-9	02/12/08	21.81	-	-	1,174.96	33.5	1,153.15
56	DW-9	11/10/08	21.30	-	-	1,174.96	33.5	1,153.66
56	DW-9	02/11/09	22.25	-	-	1,174.96	33.5	1,152.71
56	DW-9	08/11/09	20.68	-	-	1,174.96	33.5	1,154.28
56	DW-9	02/03/10	19.86	-	-	1,174.96	33.5	1,155.10
56	DW-9	10/28/10	19.45	-	-	1,174.96	33.5	1,155.51
56	DW-9	03/01/11	20.81	-	-	1,174.96	33.5	1,154.15
58	PZ-1	08/18/09	18.13	-	-	1,169.80	100.0	1,151.67
58	PZ-1	12/22/09	16.89	-	-	1,169.80	100.0	1,152.91
58	PZ-1	02/03/10	16.46	-	-	1,169.80	100.0	1,153.34
58	PZ-1	10/29/10	16.72	-	-	1,169.80	100.0	1,153.08
58	PZ-1	03/01/11	16.63	-	-	1,169.80	100.0	1,153.17

Notes: Elevations are measured in feet.
Well top of riser (TOR) elevations are referenced to the top nut of the fire hydrant at the intersection of Hoffman and Augusta with an elevation of 1,173.14 feet above mean sea level (AMSL) per information provided by SEH.
fbtoc - Feet below top of casing
* - Static water level prior to pump-out start-up.
** - Elevations for wells containing LNAPL were corrected using a specific gravity of 0.76.
Groundwater not measured, or results not applicable, were represented with a hyphen (-).

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
MONITORING WELLS												
1	DW-1	*G	03/05/98	<1	<1	<1	<3	<5	<5	<1	-	-
1	DW-1		03/25/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
1	DW-1	*G	06/13/98	<1	<1	<1	<3	-	<5	<1	-	-
1	DW-1		06/13/98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
2	DW-2	G	03/06/98	<1	<1	<1	<3	<5	<5	**20**	-	-
2	DW-2		03/25/98	<0.30	<0.30	<0.50	<0.80	<1.0	<0.40	<0.50	-	-
2	DW-2	G	06/13/98	<1	<1	<1	<3	-	<5	<1	-	-
2	DW-2		06/13/98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
3	DW-3	G	03/16/98	<1	<1	<1	<3	<5	<5	<1	-	-
3	DW-3		03/25/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
3	DW-3	G	06/13/98	<1	<1	<1	<3	-	<5	<1	-	-
3	DW-3		06/13/98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
3	DW-3		09/22/99	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		12/09/99	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		04/20/00	<1.0	**2.2**	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		07/27/00	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
3	DW-3		10/20/00	**4.9**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		01/16/01	<1.0	**4.4**	<1.0	**3.0**	<5.0	-	-	<100	-
3	DW-3	2	04/12/01	<1.0	**6.1**	<1.0	<3.0	<5.0	-	-	**400**	-
3	DW-3		08/13/01	**17**	<1.0	<1.0	<3.0	<5.0	<5.0	<5.0	<100	-
3	DW-3		10/09/01	**25**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/19/01	**24**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		01/29/02	**8.8**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/16/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		08/19/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/05/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		01/17/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/04/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		07/24/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		10/28/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		02/04/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/07/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		08/24/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		02/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/02/05	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
3	DW-3		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
3	DW-3		05/05/06	Abandoned								
3	DW-3R		05/03/07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
3	DW-3R		09/25/07	<1.0	**1.0**	<1.0	<1.0	<1.0	<1.0	<1.0	<50	-
3	DW-3R		02/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	<50	-
4	DW-3R		11/12/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-3R		02/12/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-3R		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-3R		02/03/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-3R		10/29/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-3R		03/03/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
4	DW-4	G	03/16/98	<1	<1	<1	<3	<5	<5	<1	-	-
4	DW-4		03/25/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
4	DW-4	G	06/13/98	<1	<1	<1	<3	-	<5	<1	-	-
4	DW-4		06/13/98	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
45	DW-5		12/24/98	**1,600**	**81**	**64**	**41**	<5.0	-	-	**2,800**	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
45	DW-5		12/30/98	1,300	47	51	41	44	-	-	1,700	-
45	DW-5		01/25/99	600	28	41	41	5.4	-	-	1,100	-
45	DW-5		02/18/99	400	13	25	<5.0	<25	-	-	550	-
45	DW-5		03/17/99	380	13	22	17	<5.0	-	-	610	-
45	DW-5		04/22/99	240	<1.0	13	18	<5.0	-	-	590	-
45	DW-5		05/21/99	160	8.7	14	13	<1.0	-	5.8	-	-
45	DW-5		06/24/99	170	6.2	9.9	8.9	<5.0	-	-	280	-
45	DW-5		07/19/99	170	5.7	11	11	<5.0	-	-	300	-
45	DW-5		08/23/99	160	6.2	12	8.9	5.3	-	-	280	-
45	DW-5		09/22/99	170	5.7	11	8.6	<5.0	-	-	280	-
45	DW-5		10/25/99	160	5.6	12	10	<5.0	-	-	260	-
45	DW-5		11/24/99	150	5.8	11	10	5.2	-	-	250	-
45	DW-5		12/09/99	140	5.7	12	9.7	<5.0	-	-	230	-
45	DW-5		01/13/00	140	10	12	15	<130	-	-	290	-
45	DW-5		02/17/00	150	5.5	12	11	<5.0	-	-	270	-
45	DW-5		03/13/00	140	4.3	11	9	<5.0	-	-	220	-
45	DW-5		04/20/00	-	8	11	13	6.7	-	-	320	-
45	DW-5		05/23/00	140	3.6	8.2	7.8	<5.0	-	-	180	-
45	DW-5		06/17/00	96	4.9	11	10	<5.0	-	-	270	-
45	DW-5		07/27/00	150	4	9.2	9.8	<5.0	-	-	210	-
45	DW-5		10/20/00	130	2.1	5.5	6	<5.0	-	-	120	-
45	DW-5		01/16/01	57	3.3	7.7	9.9	<5.0	-	-	170	-
45	DW-5		04/12/01	79	<1.0	6	9.2	<5.0	-	-	130	-
45	DW-5		08/13/01	44	1.3	8	9	<5.0	-	-	190	-
45	DW-5		10/09/01	68	1.9	9.7	7.9	<5.0	-	-	180	-
45	DW-5		01/29/02	81	<1.0	1.3	<3.0	<5.0	-	-	<100	-
45	DW-5		04/16/02	7	1.6	16	12	<5.0	-	-	260	-
45	DW-5		11/05/02	98	<1.0	5.3	7.1	<5.0	-	-	170	-
45	DW-5		01/16/03	110	<1.0	9	10	<5.0	-	-	310	-
45	DW-5		04/04/03	230	1.2	20	20	<5.0	-	-	530	-
45	DW-5		07/24/03	350	1.1	29	16	6.0	-	-	670	-
45	DW-5		10/28/03	280	1.3	20	11	<5.0	-	-	610	-
45	DW-5		02/04/04	470	<1.0	25	18	<5.0	-	-	650	-
45	DW-5		04/07/04	470	1.3	30	25	<5.0	-	-	630	-
45	DW-5		08/24/04	400	<1.0	10	18	<5.0	-	-	510	-
45	DW-5		02/16/05	230	2.1	31	39	<5.0	-	-	400	-
45	DW-5		11/03/05	180	2.3	30	25	<1.0	-	-	350	-
45	DW-5		05/04/06	180	1.5	32	32	1.3	-	-	440	-
45	DW-5	5	12/14/06	74	<1.0	42	19	1.6	-	-	260	-
45	DW-5	5	03/20/07	64	<1.0	55	19	1.8	-	-	280	-
45	DW-5	6	09/25/07	100	2.3	43	29	<1.0	-	-	410	-
45	DW-5	6	02/12/08	79	<1.0	32	28	<1.0	-	-	270	-
45	DW-5		11/10/08	12.3	<1.0	12.5	7.5	<5.0	-	-	<100	-
45	DW-5		02/11/09	58.8	<1.0	11.5	16.8	<5.0	-	-	186	-
45	DW-5		08/11/09	18.4	<1.0	15.3	14.9	<5.0	-	-	<100	-
45	DW-5		02/04/10	36.1	<1.0	24.4	6.9	<5.0	-	-	<100	-
45	DW-5		10/28/10	51.5	1.6	14.9	15.6	<5.0	-	-	161	-
45	DW-5		03/03/11	20.4	<1.0	22.1	23.1	<5.0	-	-	162	-
46	DW-6	G	08/20/98	330	<100	<100	<300	-	<500	<100	-	-
46	DW-6		04/05/99	140	3.9	29	17.4	-	-	-	720	150
46	DW-6		06/21/99	120	2.1	25	14	-	-	-	660	100
46	DW-6		09/22/99	99	1.4	16	9.3	10	-	-	400	-
46	DW-6		12/09/99	64	5.3	20	29	20	-	-	570	-
46	DW-6		04/20/00	170	1.6	9.8	24	13	-	-	760	-
46	DW-6		07/27/00	51	1.6	9.8	13	<5.0	-	-	260	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
46	DW-6		10/20/00	40	<1.0	10	7.3	6.2	-	-	370	-
46	DW-6		01/16/01	93	1.5	5.0	17	5.1	-	-	420	-
46	DW-6		04/12/01	86	<1.0	2.8	15	7.7	-	-	290	-
46	DW-6		08/13/01	110	<1.0	3.2	16	6.6	-	-	300	-
46	DW-6		10/09/01	50	<1.0	3.5	4.2	<5.0	-	-	180	-
46	DW-6		01/29/02	120	1.1	7.0	21	5.6	-	-	340	-
46	DW-6		04/16/02	93	<1.0	4.7	19	5.8	-	-	290	-
46	DW-6		08/19/02	160	1.1	2.7	16	5.1	-	-	360	-
46	DW-6		11/05/02	130	<1.0	2.1	17	<5.0	-	-	290	-
46	DW-6		01/17/03	76	<1.0	2.4	7.8	<5.0	-	-	180	-
46	DW-6		04/04/03	23	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		07/24/03	17	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		10/28/03	48	<1.0	1.7	5.3	<5.0	-	-	150	-
46	DW-6		02/04/04	45	<1.0	1.8	<3.0	<5.0	-	-	120	-
46	DW-6		04/07/04	32	<1.0	<1.0	<3.0	<5.0	-	-	130	-
46	DW-6		08/24/04	29	<1.0	1.6	<3.0	<5.0	-	-	140	-
46	DW-6		02/16/05	33	<1.0	2.4	<3.0	5.3	-	-	170	-
46	DW-6		11/03/05	26	<1.0	<1.0	<3.0	<1.0	-	-	63	-
46	DW-6		05/04/06	27	<1.0	1.7	<3.0	<1.0	-	-	71	-
46	DW-6		12/01/06	22	<0.36	2.5	2.7	1.2	-	-	80	-
46	DW-6	5	03/20/07	24	<1.0	2.8	2.4	1.1	-	-	100	-
46	DW-6		09/25/07	16	<1.0	1.5	<3.0	<1.0	-	-	<50	-
46	DW-6		02/13/08	11	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
46	DW-6		11/11/08	8.5	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		02/11/09	10	<1.0	1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		08/11/09	6.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		02/04/10	6.6	<1.0	1.1	<3.0	<5.0	-	-	<100	-
46	DW-6		10/28/10	8.3	<1.0	1.2	<3.0	<5.0	-	-	<100	-
46	DW-6		03/03/11	5.9	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
48	DW-7S	3	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
48	DW-7S		10/09/01	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		01/29/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		04/16/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		11/05/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		04/03/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		10/28/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		04/07/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		02/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		11/02/05	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
48	DW-7S		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
48	DW-7S		11/30/06	<0.14	<0.36	<0.40	<1.1	<0.36	-	-	<26	-
48	DW-7S		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
48	DW-7S		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
48	DW-7S		11/11/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		10/29/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
48	DW-7S		03/03/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
49	DW-7D	3	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
49	DW-7D		10/09/01	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		01/29/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		04/16/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		11/05/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
49	DW-7D		04/03/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		10/28/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		04/07/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		02/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		11/02/05	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
49	DW-7D		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
49	DW-7D		11/30/06	<0.14	<0.36	<0.40	<1.1	<0.36	-	-	<26	-
49	DW-7D		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
49	DW-7D		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
49	DW-7D		11/11/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		10/29/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
49	DW-7D		03/03/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		05/03/07	**7.6**	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
55	DW-8		09/25/07	**3.1**	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
55	DW-8		02/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
55	DW-8		11/11/08	**2.0**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		02/12/09	**1.2**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		08/11/09	**6.3**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		02/04/10	**9.4**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		10/29/10	**9.4**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
55	DW-8		03/03/11	**8.5**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
57	DW-8S		12/29/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
57	DW-8S	3	02/12/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
57	DW-8S		02/12/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
57	DW-8S		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
57	DW-8S		02/04/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
57	DW-8S		10/29/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
57	DW-8S		03/03/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
56	DW-9	1	05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
56	DW-9	1, 5	09/25/07	**1,000**	**93**	**150**	**61**	<25	<120	<25	**3,000**	-
56	DW-9	5	02/13/08	**1,200**	<10	**200**	<30	<10	-	-	**4,300**	-
56	DW-9		11/11/08	**797**	**21.6**	**335**	**5.4**	<5.0	-	-	**3,730**	-
56	DW-9		02/12/09	**1,330**	<5.0	**256**	<15.0	<25.0	-	-	**3,920**	-
56	DW-9		08/11/09	**5.2**	<1.0	**6.9**	<3.0	**16.4**	-	-	**1,430**	-
56	DW-9		02/04/10	**1,690**	<5.0	**144**	<15.0	<25.0	-	-	**3,980**	-
56	DW-9		10/28/10	**924**	<5.0	**169**	<15.0	<25.0	-	-	**3,040**	-
56	DW-9		03/04/11	<1.0	**1.1**	**38.5**	**3.9**	**23.2**	-	-	**2,610**	-
21	BFI-MW-2		03/25/98	<0.30	**0.61**	<0.50	<1.2	<1.0	<0.40	<0.50	-	**170**
23	MW-1		7/17/91	4,000	8,800	2,000	9,600	2,700	-	-	50,000	73,000
23	MW-1		8/13/91	3,800	8,700	2,200	8,900	11,000	-	-	87,000	-
23	MW-1		1/13/92	5,100	8,400	2,700	6,800	2,000	-	-	63,000	-
23	MW-1		3/30/93	560	1,800	400	3,000	ND	-	-	17,000	43,000
23	MW-1		6/1/93	1,000	3,000	750	3,480	ND	-	-	300	-
23	MW-1		9/21/93	360	1,900	ND	2,680	1,500	-	-	20,000	-
23	MW-1		12/23/93	ND	ND	ND	ND	ND	-	-	140	-
23	MW-1		6/27/94	-	-	-	-	-	-	-	-	-
23	MW-1		12/1/94	1,180	1,600	602	2,380	ND	-	-	13,400	-
24	MW-10		7/17/91	ND	ND	ND	ND	ND	-	-	7	ND
24	MW-10		8/13/91	ND	ND	ND	ND	ND	-	-	ND	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
24	MW-10		1/13/92	7	2	ND	ND	34	-	-	150	-
24	MW-10		3/30/93	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		6/1/93	ND	ND	ND	ND	ND	-	-	ND	-
24	MW-10		9/21/93	ND	ND	ND	ND	ND	-	-	ND	-
24	MW-10		12/23/93	ND	ND	ND	ND	ND	-	-	140	-
24	MW-10		6/27/94	11	ND	ND	13	ND	-	-	1890	-
24	MW-10		12/1/94	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		3/9/95	ND	ND	ND	ND	ND	-	-	ND	-
24	MW-10		7/2/96	ND	ND	ND	ND	ND	-	-	ND	100
24	MW-10		4/10/97	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		6/13/97	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		9/9/97	ND	ND	ND	ND	ND	-	-	ND	400
24	MW-10		1/29/98	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		4/30/98	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		8/3/98	ND	ND	ND	ND	ND	-	-	ND	ND
24	MW-10		12/3/98	ND	ND	ND	4.1	ND	-	-	ND	ND
24	MW-10		4/5/99	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	ND
24	MW-10		6/21/99	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	ND
24	MW-10		10/6/99	<1.0	<1.0	<1.0	<3.0	-	-	-	ND	ND
24	MW-10		12/28/00	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	ND
24	MW-10		3/22/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	110
24	MW-10		6/26/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
24	MW-10		9/28/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	110
24	MW-10		3/12/02	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
24	MW-10		10/11/02	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	160
24	MW-10		6/9/03	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
24	MW-10		2/25/04	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<94
5	MW-10D	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
5	MW-10D	3	2/12/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<110
25	MW-14		7/17/91	ND	ND	ND	ND	ND	-	-	ND	ND
25	MW-14		8/13/91	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		1/13/92	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		3/30/93	50	1.1	ND	ND	ND	-	-	130	ND
25	MW-14		6/1/93	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		9/21/93	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		12/23/93	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		6/27/94	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		12/1/94	ND	ND	ND	ND	ND	-	-	ND	-
25	MW-14		3/9/95	ND	ND	ND	ND	ND	-	-	ND	ND
25	MW-14		7/2/96	ND	ND	ND	ND	ND	-	-	ND	100
25	MW-14		4/10/97	ND	ND	ND	ND	ND	-	-	ND	ND
25	MW-14		6/13/97	ND	ND	ND	ND	ND	-	-	ND	ND
25	MW-14		9/9/97	ND	<1.0	<1.0	<1.0	<3.0	-	-	<10	300
25	MW-14		1/29/98	ND	ND	ND	ND	ND	-	-	ND	300
25	MW-14		4/30/98	ND	ND	ND	ND	ND	-	-	ND	100
25	MW-14		8/3/98	ND	ND	ND	ND	ND	-	-	ND	210
25	MW-14		12/3/98	ND	ND	1	5.1	ND	-	-	ND	ND
25	MW-14		4/5/99	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	ND
25	MW-14		6/21/99	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	190
25	MW-14		10/6/99	<1.0	<1.0	<1.0	<3.0	ND	-	-	ND	ND
25	MW-14		12/28/00	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
25	MW-14		3/22/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
25	MW-14		6/26/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
25	MW-14		9/28/01	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID	Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
25	MW-14	3/12/02	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	1700
25	MW-14	10/11/02	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
25	MW-14	6/19/03	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<100
25	MW-14	2/25/04	<1.0	<1.0	<1.0	<3.0	ND	-	-	<50	<120
6	MW-14D	11/30/06	<0.14	<0.36	<0.40	<1.1	**0.43 J**	-	-	<26	-
6	MW-14D	3/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
6	MW-14D	9/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
6	MW-14D	2/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
6	MW-14D	11/12/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
26	MW-15	7/17/91	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	8/13/91	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	1/13/92	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	3/30/93	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	6/1/93	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	9/21/93	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	12/23/93	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	6/27/94	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	12/1/94	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	3/9/95	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	7/2/96	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	4/10/97	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	6/13/97	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	9/9/97	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	1/29/98	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	4/30/98	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	8/3/98	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	12/3/98	ND	ND	ND	ND	ND	-	-	ND	ND
26	MW-15	4/5/99	<1.0	<1.0	<1.0	<3.0	-	-	-	ND	ND
26	MW-15	6/21/99	-	-	-	-	-	-	-	-	-
26	MW-15	10/6/99	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
26	MW-15	12/28/00	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
26	MW-15	3/22/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
26	MW-15	6/26/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
26	MW-15	9/28/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
26	MW-15	3/12/02	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	230
26	MW-15	10/11/02	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	170
26	MW-15	2/25/04	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<94
27	MW-16	5/7/93	**550**	**23**	**74**	ND	ND	-	-	**2,600**	**400**
27	MW-16	6/1/93	**1,300**	**190**	**110**	ND	ND	-	-	**390**	-
27	MW-16	9/21/93	**390**	**73**	**1**	**9.9**	**740**	-	-	**4,100**	-
27	MW-16	12/23/93	**1,200**	**6**	**41**	ND	**72**	-	-	**1,800**	-
27	MW-16	6/27/94	**2,520**	**16**	**134**	ND	**105**	-	-	**6,530**	-
27	MW-16	12/1/94	**34**	ND	ND	ND	ND	-	-	**1,050**	-
27	MW-16	3/9/95	**10**	ND	ND	ND	ND	-	-	**1,100**	-
27	MW-16	7/2/96	**1.3**	ND	ND	ND	ND	-	-	ND	100
27	MW-16	4/10/97	ND	ND	ND	ND	ND	-	-	ND	ND
27	MW-16	6/13/97	ND	ND	ND	ND	ND	-	-	ND	ND
27	MW-16	9/9/97	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	ND	100
27	MW-16	1/29/98	<1.0	<1.0	<1.0	<3.0	<10	-	-	ND	100
27	MW-16	4/30/98	ND	ND	ND	ND	ND	-	-	ND	200
27	MW-16	8/3/98	ND	ND	ND	ND	ND	-	-	ND	620
27	MW-16	12/3/98	ND	ND	ND	ND	ND	-	-	ND	ND
27	MW-16	4/5/99	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
27	MW-16		6/21/99	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		10/6/99	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		12/9/99	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
27	MW-16		4/20/00	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		12/28/00	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		3/22/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		6/26/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		9/28/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		3/12/02	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		10/11/02	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		6/9/03	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
27	MW-16		2/25/04	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<94
27	MW-16		11/30/06	<0.14	<0.36	<0.40	<1.1	<0.36	-	-	<26	-
27	MW-16		3/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
27	MW-16		9/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
27	MW-16		2/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
27	MW-16		11/11/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		2/12/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		8/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		2/4/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		10/28/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
27	MW-16		3/3/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		9/21/93	ND	ND	ND	ND	ND	-	-	ND	-
28	MW-17		12/23/93	ND	ND	ND	ND	ND	-	-	ND	-
28	MW-17		6/27/94	ND	ND	ND	ND	ND	-	-	ND	-
28	MW-17		12/1/94	ND	ND	ND	ND	ND	-	-	ND	ND
28	MW-17		3/9/95	ND	ND	ND	ND	ND	-	-	ND	-
28	MW-17		7/2/96	**3.7**	ND	ND	ND	ND	-	-	ND	-
28	MW-17		4/10/97	**2.6**	ND	ND	ND	ND	-	-	ND	ND
28	MW-17		6/13/97	ND	ND	ND	ND	ND	-	-	ND	ND
28	MW-17		9/9/97	<1.0	<1.0	<1.0	<3.0	<10	-	-	-	300
28	MW-17		1/29/98	ND	ND	ND	ND	ND	-	-	ND	ND
28	MW-17		4/30/98	**1,540**	<10	<10	<30	<10	-	-	**2,100**	**300**
28	MW-17	G	6/13/98	**2,100**	<100	<100	<300	-	<500	**140**	-	-
28	MW-17		8/3/98	**407**	1.1	ND	ND	ND	-	-	580	**120**
28	MW-17		12/3/98	**980**	ND	ND	ND	-	-	-	1,300	ND
28	MW-17		4/5/99	**360**	<2.0	<2.0	<6.0	-	-	-	**540**	<100
28	MW-17		6/21/99	**35**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		10/6/99	**2.8**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		12/9/99	**9.2**	**1.7**	**1.2**	**5.8**	<5.0	-	-	<100	-
28	MW-17		4/20/00	**2.9**	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		12/28/00	**3.4**	<1.0	<1.0	<3.0	-	-	-	<50	130
28	MW-17		3/22/01	**2.1**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		6/26/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		9/28/01	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		3/12/02	**2.5**	<1.0	<1.0	<3.0	-	-	-	<50	<100
28	MW-17		10/11/02	<1.0	<1.0	<1.0	<3.9	-	-	-	<50	<100
28	MW-17		6/9/03	<1.0	<1.0	<1.0	3.2	-	-	-	<50	<100
28	MW-17		7/24/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		10/28/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		2/25/04	<1.0	<1.0	<1.0	<3.0	-	-	-	<50	<94
28	MW-17		4/7/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		8/24/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		2/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		11/2/05	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
28	MW-17		5/4/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
28	MW-17		12/1/06	<0.14	<0.36	<0.40	<1.1	<0.36	-	-	<26	-
28	MW-17		3/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
28	MW-17		9/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
28	MW-17		2/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
28	MW-17		11/11/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		2/12/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		8/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		2/4/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		10/28/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		3/3/11	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
30	MW-19		6/12/03	62	73	8.6	118	<5.0	-	-	2,200	15,000
30	MW-19		2/26/04	900	3,000	690	3,040	-	-	-	13,000	1,700
30	MW-19	T7	10/28/10	815	2,110	460	1,840	8.9	-	-	8,970	1,800
30	MW-19		3/2/11	395	1,400	354	1,500	<25.0	-	-	9,240	2,500
31	MW-20		7/2/96	7,340	11,800	1,930	1,160	2,750	-	-	56,900	100
31	MW-20		4/10/97	4,500	12,500	1,640	13,100	<500	-	-	46,600	10,600
31	MW-20		6/13/97	8,370	9,810	1,900	11,400	361	-	-	52,300	11,200
31	MW-20		9/9/97	1,980	3,060	790	3,730	<2000	-	-	15,200	400
31	MW-20		1/29/98	16,700	3,370	4,330	24,100	<2000	-	-	137,000	822,000
31	MW-20 Abandoned		10/4/10									
32	MW-21		2/26/04	240	490	120	720	<2.5	-	-	5,600	3,800
32	MW-21 Abandoned		10/6/10									
52	MW-23		6/12/03	3,800	3,100	1,200	6,300	<25	-	-	24,000	4,300
52	MW-23		2/26/04	1,100	930	520	2,410	-	-	-	12,000	1,600
52	MW-23 Abandoned		10/6/10									
	MW-26	T7	10/27/10	1,720	4,520	1,670	7,100	<50.0	-	-	38,800	9,200
	MW-26	T7	3/2/11	3,310	10,000	1,120	5,280	105	-	-	44,900	7,700
	MW-27	T7	10/27/10	1,760	5,620	1,370	5,900	45.7	-	-	31,200	5,100
	MW-27	T7	3/2/11	727	2,160	785	4,010	<100	-	-	22,900	5,700
	MW-28	T7	10/25/10	6.1	18.3	38.6	127	17.0	-	-	5,570	3,600
	MW-28	T7	3/2/11	<5.0	5.8	26.0	101	35.6	-	-	9,810	9,800
	MW-29	T7	10/25/10	<1.0	9.6	96.1	529	29.6	-	-	5,510	3,300
	MW-29	T7	3/2/11	<5.0	<5.0	135	851	57.6	-	-	15,100	10,700
	MW-30	T7	10/25/10	628	1,230	235	870	34.0	-	-	13,000	4,500
	MW-30	T7	3/2/11	67.1	611	314	1,230	62.9	-	-	22,000	14,600
POTABLE WELLS												
9	CW-3		03/25/98	18	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		05/20/98	11	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3	G	06/10/98	9.3	<1	<1	<3	-	<5	<1	-	-
9	CW-3		06/10/98	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
9	CW-3		08/20/98	6.2	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		09/09/98	5.2	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		10/05/98	4.8	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		11/18/98	3.4	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		12/15/98	2.9	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
9	CW-3		01/25/99	**1.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		02/18/99	**1.3**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		03/17/99	**0.86**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		04/22/99	**0.63**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		05/21/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
9	CW-3		06/24/99	**0.37**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		07/19/99	**0.48**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		08/23/99	**1.4**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		09/22/99	**1.1**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		10/25/99	**0.59**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		11/24/99	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		12/09/99	**0.36**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		01/13/00	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
9	CW-3		02/17/00	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		03/13/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		04/20/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		05/23/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		06/17/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		07/27/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
9	CW-3		08/16/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		09/12/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		10/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
9	CW-3		04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	08/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	11/05/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		04/03/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	07/24/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3	3	10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		09/25/07	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
9	CW-3		01/28/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.50	<0.50	-	-
9	CW-3		04/07/04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
9	CW-3		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
9	CW-3		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
9	CW-3		11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
9	CW-3		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
9	CW-3		11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
9	CW-3		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
9	CW-3		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
9	CW-3	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
9	CW-3	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
9	CW-3		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4		12/19/90	**2.2**	<0.2	<0.2	**0.4**	<0.2	<0.5	**0.3**	-	-
10	CW-4		10/23/97	**16**	<0.30	<0.50	<1.2	<1.0	<0.40	**1.5**	-	-
10	CW-4		03/25/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4	G	06/10/98	**3.0**	<1	<1	<3	-	<5	**2.2**	-	-
10	CW-4		06/10/98	**2.9**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.1**	-	-
10	CW-4	G	06/13/98	**3.5**	<1	<1	<3	-	<5	**2.7**	-	-
10	CW-4		08/20/98	**6.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
10	CW-4		09/09/98	8.8	<0.3	<0.5	<1.2	<1.0	<0.4	0.78	-	-
10	CW-4		10/05/98	12	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
10	CW-4		11/18/98	19	<0.3	<0.5	<1.2	<1.0	<0.4	0.6	-	-
10	CW-4		12/15/98	18	0.4	<0.5	<1.2	<1.0	<0.4	0.8	-	-
10	CW-4		01/25/99	20	0.38	0.51	<1.2	<1.0	<0.4	1.1	-	-
10	CW-4		02/18/99	19	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
10	CW-4		03/17/99	19	<0.3	0.55	<1.2	<1.0	<0.4	0.88	-	-
10	CW-4		04/22/99	12	<0.3	<0.50	<1.2	<1.0	<0.4	0.51	-	-
10	CW-4		05/21/99	8.8	<0.3	<0.50	<1.2	<1.0	<0.4	0.62	-	-
10	CW-4		06/24/99	11	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		07/19/99	7.7	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		08/23/99	7.3	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		09/22/99	6.7	<0.30	<0.50	<1.2	<1.0	<0.40	0.59	-	-
10	CW-4		10/25/99	6.6	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		11/24/99	5.7	<0.30	<0.50	<1.2	<1.0	<0.40	0.5	-	-
10	CW-4		12/09/99	4.9	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		01/13/00	3.5	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
10	CW-4		02/17/00	3.0	<0.30	<0.50	<1.2	<1.0	<0.40	0.72	-	-
10	CW-4		03/13/00	2.4	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		04/20/00	1.7	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		05/23/00	0.49	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		06/17/00	1.0	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
10	CW-4		07/27/00	0.66	<0.30	<0.50	<1.2	<1.0	<0.40	0.67	-	-
10	CW-4		08/16/00	0.56	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		09/12/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		10/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		12/13/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
10	CW-4		02/15/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	0.55	-	-
10	CW-4		03/08/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		06/22/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	07/30/01	0.38 J	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	09/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	0.75	-	-
10	CW-4		10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	0.78	0.77	-	-
10	CW-4	3	11/19/01	0.17 J	<0.50	<0.50	<1.5	<1.0	<0.50	0.37 J	-	-
10	CW-4	3	12/03/01	0.11 J	<0.50	<0.50	<1.5	<1.0	<0.50	0.37 J	-	-
10	CW-4	3	01/29/02	1.3	<0.50	<0.50	<1.5	<1.0	<0.50	0.31 J	-	-
10	CW-4	3	02/08/02	1.8	<0.50	<0.50	<1.5	<1.0	<0.50	0.37 J	-	-
10	CW-4	3	03/19/02	2.8	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	05/23/02	4.2	<0.50	<0.50	<1.5	<1.0	<0.50	0.62	-	-
10	CW-4	3	06/07/02	4.9	<0.50	<0.50	<1.5	<1.0	<0.50	0.66	-	-
10	CW-4	3	07/30/02	5.7	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	08/19/02	6.2	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	09/09/02	6.6	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4		10/11/02	8.2	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	11/05/02	7.2	<0.50	<0.50	<1.5	<1.0	<0.50	0.70	-	-
10	CW-4	3	12/16/02	7.7	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	01/16/03	10	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
10	CW-4	3	02/06/03	11	<0.50	<0.50	<1.5	<1.0	<0.50	0.86	-	-
10	CW-4	3	03/06/03	13	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4	3	04/03/03	11	<1.0	<1.0	<3.0	<1.0	<5.0	0.089 J	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
10	CW-4	3	05/19/03	9.7	<1.0	<1.0	<3.0	<1.0	<5.0	0.63	-	-
10	CW-4	3, 4	06/19/03	7.7	<0.50	<0.50	<1.5	<1.0	<2.0	0.63	-	-
10	CW-4	1	07/24/03	8.2	<0.50	<0.50	<1.5	<1.0	<0.50	0.64	-	-
10	CW-4	3	08/12/03	7.0	<0.50	<0.50	<1.5	<1.0	<0.50	0.67	-	-
10	CW-4	1,3	09/09/03	7.7	<0.50	<0.50	<1.5	<1.0	<0.50	0.79	-	-
10	CW-4	3	10/28/03	6.4	<0.50	<0.50	<1.5	<1.0	<0.50	0.60	-	-
10	CW-4		11/25/03	6.6	<0.50	<0.50	<1.5	<1.0	<0.50	0.59	-	-
10	CW-4	3	12/31/03	5.3	<0.50	<0.50	<1.5	<1.0	<0.50	0.42 J	-	-
10	CW-4	3	01/28/04	3.9	<0.50	<0.50	<1.5	<5.0	<0.50	0.35 J	-	-
10	CW-4	3	02/04/04	2.8	<0.50	<0.50	<1.5	<5.0	<0.50	0.81	-	-
10	CW-4	3	03/02/04	3.6	<0.50	<0.50	<1.5	<5.0	<0.50	0.44 J	-	-
10	CW-4	3	04/07/04	2.8	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4	3	05/25/04	1.2	<0.50	<0.50	<1.5	<0.50	<0.50	0.38 J	-	-
10	CW-4	3	06/17/04	1.1	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
10	CW-4	3	07/26/04	0.79	<0.50	<0.50	<1.5	<0.50	<0.50	0.42 J	-	-
10	CW-4	3	08/25/04	0.92	<0.50	<0.50	<1.50	<0.50	<0.50	0.37 J	-	-
10	CW-4	3	09/15/04	0.84	<0.50	<0.50	<1.5	<0.50	<0.50	0.42 J	-	-
10	CW-4	3	10/22/04	0.48 J	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
10	CW-4	3	11/10/04	0.3 J	<0.50	<0.50	<1.5	<0.50	<0.50	0.29 J	-	-
10	CW-4	3	12/02/04	0.18 J	<0.50	<0.50	<1.5	<0.50	<0.50	0.85	-	-
10	CW-4	3	01/18/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.05	0.92	-	-
10	CW-4	3	02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	0.46 J	-	-
10	CW-4	3	03/14/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
10	CW-4	3	05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	0.31 J	-	-
10	CW-4	3	09/19/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
10	CW-4	3	11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	0.36 J	-	-
10	CW-4	3	02/15/06	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
10	CW-4	3	06/02/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
10	CW-4	3	08/21/06	0.66 J	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
10	CW-4	1, 3	11/30/06	0.78 J	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
10	CW-4		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4		04/25/07	<0.41	<1.0	<1.0	<3.0	<1.0	<5.0	<0.56	-	-
10	CW-4		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4		11/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4		02/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
10	CW-4	3	05/20/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<0.36	-	-
10	CW-4	3	08/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4	3	02/11/09	0.73 J	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4		04/28/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4	3	12/22/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4	3	02/03/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4		06/23/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4		09/30/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
10	CW-4		03/04/11	0.74 J	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
11	CW-5		01/13/00	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
11	CW-5	3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
11	CW-5	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
11	CW-5	3	10/28/03	0.091 J	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
11	CW-5		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
11	CW-5		05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
11	CW-5		11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
11	CW-5		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
11	CW-5	1	11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
11	CW-5		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
11	CW-5		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
11	CW-5	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
11	CW-5	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
11	CW-5		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
12	CW-6		01/13/00	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	-	-
12	CW-6	3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
12	CW-6	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
12	CW-6	3	10/28/03	**0.081 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
12	CW-6		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
12	CW-6		05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
12	CW-6		11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
12	CW-6		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
12	CW-6	1	11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
12	CW-6		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
12	CW-6		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
12	CW-6	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
12	CW-6	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
12	CW-6		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-7	3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-7	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-7	3	10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-7		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-7		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-7		05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
	CW-7		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	CW-7		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-7		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-7	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-7	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-7		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-8	3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-8	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-8	3	10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-8		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-8		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-8		05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
	CW-8		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	CW-8		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-8		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-8	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-8	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-8		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
GW TREATMENT PLANT												
	CW-Influent		03/25/98	**5.8**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent	G	04/23/98	**1.0**	<1	<1	<3	<5	<5	<1	-	-
	CW-Influent		06/10/98	**3.7**	**1.0**	**4.7**	**1.3**	<1.0	<1.0	<1.0	-	-
	CW-Influent		08/20/98	**0.5**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		10/05/98	**1.1**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		11/18/98	**0.34**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		12/15/98	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		01/25/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	CW-Influent		02/18/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		03/17/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		04/22/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		05/21/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		06/24/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Influent		07/19/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		08/23/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		09/22/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		10/25/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		11/24/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		12/09/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		01/13/00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
	CW-Influent		02/17/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		03/13/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		04/20/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		05/23/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		06/17/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent	1	07/27/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Influent		08/16/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		09/12/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		10/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		12/13/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-Influent	1	02/15/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		03/08/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		06/22/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	07/30/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	1, 3	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	09/11/01	**0.31 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	11/19/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	12/03/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	02/08/02	**0.6**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	*, 3	03/08/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent		04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	05/23/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Influent	3	06/07/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	07/30/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	08/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	09/09/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	10/11/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	11/05/02	**0.33 J**	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	12/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	1,3	02/06/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	1,3	03/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Influent	3	04/03/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	05/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3, 4	06/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<2.0	<0.5	-	-
	CW-Influent	3	07/24/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.5	-	-
	CW-Influent	3	01/28/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.50	<0.5	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	CW-Influent	1,3	04/07/04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Influent		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-Influent		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-Influent		11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
	CW-Influent		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
	CW-Influent	1	11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	CW-Influent		03/20/07	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<1.0	-	-
	CW-Influent		09/25/07	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<1.0	-	-
	CW-Influent		02/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Influent	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Influent	3	02/11/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Influent	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Influent	3	02/03/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Influent		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Influent	3	03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered		03/25/98	**6.8**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	G	04/23/98	<1	<1	<1	<3	<5	<5	<1	-	-
	CW-Filtered		06/10/98	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		08/20/98	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		10/05/98	**0.73**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		11/18/98	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		12/15/98	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		01/25/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		02/18/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		03/17/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		04/22/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		05/21/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		06/24/99	<0.3	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	CW-Filtered		07/19/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		08/23/99	**0.35**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		09/22/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		10/25/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		11/24/99	**5.80**	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		12/09/99	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		01/13/00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	-	-
	CW-Filtered		02/17/00	<0.30	<0.30	<0.50	<1.2	<1.0	2.1**	<0.50	-	-
	CW-Filtered		03/13/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		04/20/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	05/23/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	06/17/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered	1	07/27/00	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
	CW-Filtered		08/16/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	09/12/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	10/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1	11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		12/13/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-Filtered		02/15/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		02/28/01	**0.2**	<0.2	<0.2	<0.4	<2.0	<0.5	<0.2	-	-
	CW-Filtered		03/08/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		06/22/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3,	07/30/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3,	08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	CW-Filtered	1, 3,	09/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3,	11/19/01	<0.50	<0.50	<0.50	<1.5	<1.0	**0.92**	<0.50	-	-
	CW-Filtered	3	12/03/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1, 3	02/08/02	**0.36 J**	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3	03/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	3	04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered	1,3	05/23/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	CW-Filtered		06/07/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	07/30/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	08/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	09/09/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	10/11/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	11/05/02	**0.24 J**	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	12/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	01/16/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	02/06/03	**0.43 J**	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	03/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered	3	04/03/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	05/19/03	<0.50	<0.50	**0.55**	**3.9**	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3, 4	06/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<2.0	<0.50	-	-
	CW-Filtered	1, 3	07/24/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered	3	10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	CW-Filtered		01/28/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.50	<0.50	-	-
	CW-Filtered		04/07/04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered		08/25/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-Filtered		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-Filtered		05/04/06	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	CW-Filtered	1	11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	CW-Filtered		03/20/07	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered		09/25/07	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered		02/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	CW-Filtered	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered	3	02/11/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered	3	02/03/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	CW-Filtered	3	03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Storm Dis.		03/17/99	<0.3	**0.86**	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		04/22/99	**3.0**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	<100	<100
	Storm Dis.		09/22/99	**1.8**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		12/09/99	**1.1**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
	Storm Dis.		03/13/00	**0.6**	<0.3	<0.5	<1.2	<1.0	<0.4	<0.5	-	-
13	Nursery Well	G	02/26/98	<1	<1	<1	<3	<5	<5	<1	-	-
13	Nursery Well		02/26/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
19	AMPI Well		03/25/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
17	Bus Gar. (south)		03/25/98	<0.30	**0.35**	<0.50	<1.2	<1.0	<0.40	<0.50	-	-
GW PUMPING TESTS												
10	CW-4-1		05/20/98	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
10	CW-4-2		05/20/98	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
10	CW-4-3		05/20/98	<0.30	<0.30	<0.50	<1.2	<1.0	<0.40	<0.50	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
10	CW-4-4		05/20/98	<1.0	<1.0	<1.0	<1.0	49	-	-	<100	-
10	CW-4-5		05/21/98	<1.0	<1.0	<1.0	<1.0	<5.0	-	-	<100	-
10	CW-4-6		05/21/98	0.41	<0.30	<0.50	<1.2	<1.0	<0.40	0.46	-	-
GW Pumping Test on DW-5												
45	DW-5	G	08/20/98	2,200	140	<100	<300	-	<500	100	-	-
45	DW-5 - 2 hrs	G	08/20/98	2,300	120	<100	<300	-	<500	110	-	-
45	DW-5 - 2 hrs	G'	08/20/98	760	120	73	65	1.7	<0.40	41	2700	-
Packer Test on CW-4												
	CW-4 (70-80')	1	09/23/02	5.3	6.6	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (80-90')		09/23/02	5.5	7.9	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (90-100')		09/23/02	6.4	8.9	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	CW-4 (100-110')		09/23/02	8.2	6.8	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
Well Development DPE-1 & DPE-2												
	Holding Tank		10/29/10	70.3	150	66.5	218	8.1	-	-	2,780	-
	DPE-2	T7	11/05/10	36.8	39.1	113	467	<25.0	-	-	2,610	2,600
	DPE-2 (Post-T)		11/09/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
	DPE-1	T7,*	11/12/10	220	444	157	795	<5.0	42.8	<5.0	4,400	1,000
	DPE-1 (Post-T)		11/12/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
DPE Pilot Test												
QA/QC DUPLICATES & BLANKS												
46	DW-6		10/20/00	43	<1.0	9.7	7.3	<5.0	-	-	340	-
46	DW-6		08/13/01	110	<1.0	2.8	15	5.5	-	-	310	-
3	DW-3		01/16/01	<1.0	3.4	1.1	3.6	<5.0	-	-	<100	-
3	DW-3		04/12/01	<1.0	4.7	<1.0	<3.0	<5.0	-	-	490	-
3	DW-3		10/09/01	26	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		01/29/02	6.6	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/16/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		08/19/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		11/05/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		01/17/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/04/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		07/24/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
46	DW-6		10/28/03	48	<1.0	1.4	4.4	<5.0	-	-	150	-
3	DW-3		02/04/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		04/07/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
3	DW-3		08/24/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
28	MW-17		02/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
45	DW-5		11/02/05	160	2.3	29	26	<1.0	-	-	340	-
45	DW-5		05/04/06	180	1.5	32	33	1.3	-	-	440	-
28	MW-17		12/01/06	<0.14	<0.36	<0.40	<1.1	<0.36	-	-	<26	-
45	DW-5	5	03/20/07	64	<1.0	55	19	1.8	-	-	270	-
45	DW-5	6	09/25/07	110	2.3	45	30	<1.0	-	-	370	-
45	DW-5	6	02/12/08	80	<1.0	32	28	<1.0	-	-	290	-
45	DW-5		11/10/09	12.0	<1.0	12.3	7.1	<5.0	-	-	<100	-
45	DW-5		02/11/09	58.7	<1.0	11.4	16.3	<5.0	-	-	169	-
45	DW-5		08/11/09	17.4	<1.0	14.8	14.3	<5.0	-	-	<100	-
45	DW-5		02/04/10	38.3	<1.0	25.8	7.5	<5.0	-	-	<100	-
45	DW-5		10/28/10	51.3	<1.0	15.0	14.8	<5.0	-	-	200	-
45	DW-5		03/03/11	24.7	<1.0	26.2	27.4	<5.0	-	-	193	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	Trip Blank	1	10/20/00	<0.50	**0.58**	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		12/13/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	1	01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		02/15/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		03/08/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	*	04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		06/22/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		07/30/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		09/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	*	10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/19/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	**	01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	**1.9**	<0.50	<100	-
	Trip Blank	*	02/08/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		03/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		06/07/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		07/30/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		08/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		09/09/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		09/23/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		10/17/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		11/05/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		12/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank		01/17/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		02/06/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Trip Blank		04/03/03	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	-
	Trip Blank		05/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Trip Blank	3, 4	06/19/03	<0.50	<0.50	**0.57**	**2.0**	<1.0	<2.0	<0.50	-	-
	Trip Blank	3	07/24/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	<100	-
	Trip Blank		08/12/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank	*, 1	09/09/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	<100	-
	Trip Blank	1	11/25/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		12/31/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Trip Blank		01/28/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	-	-
	Trip Blank		02/04/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	<100	-
	Trip Blank		03/02/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	-	-
	Trip Blank		04/07/04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	Trip Blank	*	04/30/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank	*	05/03/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank	*	06/17/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank	*, 1	07/26/04	<0.50	**0.22 J**	0.16 J	0.62 J	<0.50	<0.50	<0.50	-	-
	Trip Blank		08/24/04	<1.0	<1.0	<1.0	<3.0	<5.0	<0.50	<0.50	-	-
	Trip Blank		09/16/04	<1.0	**0.2 J**	<1.0	<3.0	<5.0	<0.50	<0.50	-	-
	Trip Blank		11/22/04	<1.0	<1.0	<1.0	<3.0	<5.0	<0.50	<0.50	-	-
	Trip Blank		11/10/04	<1.0	<1.0	<1.0	<3.0	<5.0	<0.50	<0.50	-	-
	Trip Blank		12/02/04	<1.0	**0.21**	<1.0	<3.0	<5.0	<0.50	<0.50	-	-
	Trip Blank		01/19/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank		02/16/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank	3	03/14/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Trip Blank		05/27/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
	Trip Blank		09/19/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
	Trip Blank		11/02/05	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	<50	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	Trip Blank		02/15/06	<0.41	<1.0	<1.0	<3.0	<1.0	<1.0	<0.36	-	-
	Trip Blank		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
	Trip Blank	1	06/02/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Trip Blank		08/21/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	Trip Blank		12/01/06	<0.14	<0.36	<0.40	<1.1	<0.36	<0.74	<0.36	<26	-
	Trip Blank		12/01/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36		
	Trip Blank		12/14/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Trip Blank		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	<50	-
	Trip Blank	1	04/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	<50	-
	Trip Blank		05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
	Trip Blank		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
	Trip Blank		11/07/07	<1.0	<1.0	<1.0	<2.0	<1.0	<5.0	<1.0	-	-
	Trip Blank		02/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	<50	-
	Trip Blank	3	05/20/08	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<0.36	-	-
	Trip Blank	3	08/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank	3	11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank	3	11/14/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
	Trip Blank		12/29/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
	Trip Blank	3	02/11/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank		02/12/09	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	-
	Trip Blank		04/28/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank	3	08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Trip Blank		12/22/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank	3	02/03/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank		02/04/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Trip Blank		06/23/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Trip Blank MW		10/28/10	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	-
	Trip Blank PW		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
	Trip Blank		11/05/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Trip Blank		11/09/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	-
	Trip Blank MW		03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	-
	Trip Blank PW	3	03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		10/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		11/20/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		12/13/00	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		01/16/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		02/15/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		03/08/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		04/12/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		05/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		06/22/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		07/30/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		08/13/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		09/11/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		10/09/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		11/19/01	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		01/29/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		02/08/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		03/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		04/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		05/23/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		06/07/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		07/30/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		08/19/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		09/09/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	Method Blank		09/23/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		10/17/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		11/05/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		12/16/02	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		01/17/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		02/06/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank		03/06/03	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	Method Blank		04/03/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	<100	-
	Method Blank		05/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.50	<0.50	-	-
	Method Blank	4	06/19/03	<0.50	<0.50	<0.50	<1.5	<1.0	<2.0	<0.50	-	-
	Method Blank		07/24/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	<100	-
	Method Blank		08/12/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Method Blank		09/09/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Method Blank		10/28/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	<100	-
	Method Blank		11/25/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Method Blank		12/31/03	<0.50	<0.50	<0.50	<1.5	<1.0	<0.5	<0.50	-	-
	Method Blank		01/28/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	-	-
	Method Blank		02/04/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	<100	-
	Method Blank		03/02/04	<0.50	<0.50	<0.50	<1.5	<5.0	<0.5	<0.50	-	-
	Method Blank		04/07/04	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	Method Blank		06/17/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		07/26/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		08/24/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	<100	-
	Method Blank		09/21/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		10/26/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		11/10/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		12/02/04	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		01/19/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		02/19/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		03/22/05	<0.50	<0.50	<0.50	<1.5	<0.50	<0.50	<0.50	-	-
	Method Blank		06/02/05	<0.50	<0.50	<0.50	<1.5	<2.0	<0.50	<0.50	-	-
	Method Blank		09/19/05	<0.41	<1.0	<1.0	<3.0	<1.0	<5.0	<0.36	-	-
	Method Blank		11/02/05	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
	Method Blank		02/15/06	<0.41	<1.0	<1.0	<3.0	<1.0	<5.0	<0.36	-	-
	Method Blank		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	<50	-
	Method Blank		06/02/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	Method Blank		08/21/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	Method Blank		11/30/06	<0.41	<0.67	<0.54	<2.6	<0.61	<0.74	<0.36	-	-
	Method Blank		12/01/06	<0.41	<0.36	<0.4	<1.1	<0.36	<0.74	<0.36	<26	-
	Method Blank		12/01/06	<0.41	<0.36	<0.4	<1.1	<0.36	-	-	<26	-
	Method Blank		12/14/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Method Blank		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	<5.0	<1.0	-	-
	Method Blank		04/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		05/03/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		09/25/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		11/07/07	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		02/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		05/20/08	<1.0	<1.0	<1.0	<3.0	<1.0	<1.0	<1.0	-	-
	Method Blank		08/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		11/12/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		11/14/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
	Method Blank		12/29/08	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		02/11/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		04/28/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		02/12/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
	Method Blank		08/10/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		08/11/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Method Blank		12/22/09	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		02/03/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-

TABLE 11 - GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Map ID#	Sample ID		Date	Benzene (µg/L)	Toluene (µg/L)	Ethyl Benzene (µg/L)	Xylenes (µg/L)	Methyl Tert-Butyl Ether (µg/L)	Naphthalene (µg/L)	1,2-Dichloro-ethane (µg/L)	Gasoline Range Organics (µg/L)	Diesel Range Organics (µg/L)
	Method Blank		02/04/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Method Blank		06/23/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank		09/30/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Method Blank MW		10/28/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Method Blank PW		10/29/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
	Method Blank		11/05/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	<100
	Method Blank		11/09/10	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	<100	<100
	Method Blank MW		03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<100	<100
	Method Blank PW		03/04/11	<1.0	<1.0	<1.0	<3.0	<1.0	<4.0	<1.0	-	-
	Pump Blank		11/19/01	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		11/05/02	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		01/17/03	<1.0	1.2	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		07/24/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		10/28/03	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		04/07/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		08/24/04	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		02/16/05	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		11/02/05	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Pump Blank		05/04/06	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Pump Blank		03/20/07	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Pump Blank		02/13/08	<1.0	<1.0	<1.0	<3.0	<1.0	-	-	<50	-
	Pump Blank		11/12/08	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		12/29/08	<1.0	<1.0	<1.0	<3.0	9.2	<4.0	<1.0	<100	-
	Pump Blank		02/12/09	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		02/04/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		10/29/10	<1.0	<1.0	<1.0	<3.0	<5.0	-	-	<100	-
	Pump Blank		03/03/11	<1.0	1.5	<1.0	<3.0	<5.0	-	-	<100	-
	HRL / *HBV*	-	-	2	200	50	300	*70*	300	4	*200*	*200*
	MCL	-	-	5	1,000	700	10,000	NE	NE	5	NE	NE
	NPDES	-	-	5	5	5	5	NE	NE	5	NE	NE

5/3/2011

Note: Concentrations in micrograms per liter (µg/L), equivalent to parts per billion.
Results at or below the laboratory reporting limits (RLs) were preceded by the less than symbol (<).
Analytes not sampled, or results not applicable, were represented with a hyphen (-).
Bolded values exceeded the reporting limits for the selected analytes.
G - Samples analyzed using GC in Geoprobe Sampling Vehicle.
HRL/HBV - Health Risk Limit / Health Based Values (Minnesota Department of Health\)
MCL - Maximum Contaminant Levels (Environmental Protection Agency, http://www.epa.gov/safewater/mcl.html#mcls, 3/8/2005)
NPDES - National Pollutant Discharge Elimination System limits only apply to water discharged from CW-4 (last revised 4/11/06).

ND - Not Detected
D - Duplicate
* - Other petroleum related VOCs detected.
** - Concentration due to sample carry over.

1. One or more non-petroleum VOCs detected.
2. Large unidentified peak present in DW-3 and Dup GRO (tentative ID 2-ethyl-1-hexanol).
3. Benzene and 1,2-Dichloroethane were not detected between the MDL and RL unless J flagged
4. Reporting limit for naphthalene was raised due to carryover from a previous sample.
5. Early and late eluting peaks were present outside the GRO window of analysis.
6. Early eluting peaks were present outside the GRO window of analysis.
7. Low boiling point hydrocarbons present in DRO sample.

TABLE 12 - OTHER NOTABLE GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

ID#	Sample	Date	Acetone (ug/L)	Allyl Chloride (µg/L)	n-Butylbenzene	Chlorobenzene (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Ethyl Ether (µg/L)	Isopropylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	Methyl Ethyl Ketone (µg/L)	Methyl Isobutyl Ketone (µg/L)	n-Propylbenzene (µg/L)	Tetrahydrofuran (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)
	MONITORING WELLS																
	DW-3R	09/25/07	5.4	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	DW-8	05/03/05	<5.0	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<10.0	-	<10.0
	DW-8	09/25/07	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	DW-8S	12/29/08	10.6	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	DW-8S	02/12/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	DW-9	05/03/05	27.7	<2.0	-	<1.0	1.9	<1.0	<1.0	-	-	10.3	<5.0	-	<10.0	-	<10.0
	DW-9	09/25/07	<120	<120	-	<25	<120	<25	<1.0	-	-	<5.0	<5.0	-	<120	-	<120
	MW-10D	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	MW-10D	02/12/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	DPE-1	11/12/10	<50.0	<20.0	14.3	<5.0	<5.0	<20.0	<20.0	15.9	5.5	60.4	<20.0	40.9	187	276	82.8
	POTABLE WELLS																
9	CW-3	02/16/05	-	1.0	-	<0.50	-	-	<5.0	-	-	3.3 J	2.1 J	-	<5.0	-	<5.0
	CW-3	11/30/06	<2.3	<2.0	-	<0.41	<0.37	<0.24	<0.98	-	-	<4.3	-	-	<1.7	-	<1.7
	CW-3	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-3	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-3	11/12/08	<10.0	<4.0	-	<1.0	<1.0	1.8	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-3	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-3	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
10	CW-4	02/16/05	-	0.47 J	-	0.20 J	-	-	0.56 J	-	-	3.5 J	2.2 J	-	0.83 J	-	0.83 J
	CW-4	11/30/06	<2.3	<2.0	-	<0.41	<0.37	0.43 J	<0.98	-	-	<4.3	-	-	<1.7	-	<1.7
	CW-4	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	04/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	11/07/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	02/12/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	05/20/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-4	08/13/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	02/11/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	04/28/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	12/22/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	02/03/10	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-4	06/23/10	<10.0	<4.0	<1.0	<1.0	<1.0	<1.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-4	09/30/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-4	03/04/11	<25.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
11	CW-5	11/30/06	<2.3	<2.0	-	<0.41	<0.37	0.56 J	<0.98	-	-	<4.3	-	-	<1.7	-	<1.7
	CW-5	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-5	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-5	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-5	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-5	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
12	CW-6	11/30/06	<2.3	<2.0	-	<0.41	<0.37	1.5	<0.98	-	-	<4.3	-	-	<1.7	-	<1.7
	CW-6	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-6	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-6	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-6	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-6	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-7	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0

TABLE 12 - OTHER NOTABLE GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

ID#	Sample	Date	Acetone (ug/L)	Allyl Chloride (µg/L)	n-Butylbenzene	Chlorobenzene (µg/L)	Chloroform (ug/L)	Chloromethane (ug/L)	Ethyl Ether (µg/L)	Isopropylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	Methyl Ethyl Ketone (µg/L)	Methyl Isobutyl Ketone (µg/L)	n-Propylbenzene (µg/L)	Tetrahydrofuran (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)
	CW-7	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-7	11/12/08	<10.0	<4.0	-	<1.0	<1.0	1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-7	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-7	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-8	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-8	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-8	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-8	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-8	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-Influent	02/16/05	-	0.85 J	-	<0.50	-	-	<5.0	-	-	3.6 J	2.1 J	-	0.47 J	-	0.47 J
	CW-Influent	11/30/06	8.1	<2.0	-	<0.41	<0.37	0.43 J	<0.98	-	-	<4.3	<5.0	-	<1.7	-	<1.7
	CW-Influent	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Influent	09/25/07	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Influent	02/12/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Influent	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Influent	02/11/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Influent	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Influent	02/03/10	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Influent	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-Influent	01/03/00	<25.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-Filtered	02/16/05	-	<1.0	-	<0.50	-	-	<5.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Filtered	11/30/06	<2.3	<2.0	-	<0.41	<0.37	0.43 J	<0.98	-	-	<4.3	<5.0	-	<1.7	-	<1.7
	CW-Filtered	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Filtered	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Filtered	02/12/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	CW-Filtered	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Filtered	02/11/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Filtered	08/10/09	<10.0	<4.0	-	<1.0	1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Filtered	02/03/10	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	CW-Filtered	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	CW-Filtered	03/04/11	<25.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Well Development DPE-1 & DPE-2																	
	DPE-2 (Post-T)	11/09/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
	DPE-1	11/12/10	<50	<20	14.3	<5.0	<5.0	<20.0	<20.0	15.9	5.5	<20.0	<20.0	40.9	187	276	82.8
	DPE-1 (Post-T)	11/12/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
QA/QC SAMPLES																	
	Trip Blank	12/27/04	-	0.75 J	-	<0.50	-	-	<5.0	-	-	3.4 J	2.4 J	-	<5.0	-	<5.0
	Trip Blank	06/02/06	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<10.0	-	<10.0
	Trip Blank	08/21/06	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<10.0	-	<10.0
	Trip Blank	11/30/06	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<10.0	-	<10.0
	Trip Blank	03/20/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	04/25/07	6.3	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	05/03/07	<5.0	<2.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<10.0	-	<10.0
	Trip Blank	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	11/07/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	02/12/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	05/20/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
	Trip Blank	08/13/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	12/29/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	02/11/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	04/28/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
	Trip Blank	12/22/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0

TABLE 12 - OTHER NOTABLE GROUNDWATER ANALYTICAL RESULTS (WELLS)
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

ID# Sample	Date	Acetone (µg/L)	Allyl Chloride (µg/L)	n-Butylbenzene	Chlorobenzene (µg/L)	Chloroform (µg/L)	Chloromethane (µg/L)	Ethyl Ether (µg/L)	Isopropylbenzene (µg/L)	p-Isopropyltoluene (µg/L)	Methyl Ethyl Ketone (µg/L)	Methyl Isobutyl Ketone (µg/L)	n-Propylbenzene (µg/L)	Tetrahydrofuran (µg/L)	1,2,4-Trimethylbenzene (µg/L)	1,3,5-Trimethylbenzene (µg/L)
Trip Blank	02/03/10	15.1	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Trip Blank	06/23/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Trip Blank	09/30/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Trip Blank	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Trip Blank	11/09/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Trip Blank	03/04/11	<25.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Method Blank	09/25/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
Method Blank	11/07/07	<5.0	<5.0	-	<1.0	<1.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
Method Blank	02/12/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
Method Blank	05/20/08	<5.0	<5.0	-	<1.0	<5.0	<1.0	<1.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
Method Blank	08/13/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	11/12/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	12/29/08	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	02/11/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	04/28/09	<10.0	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	08/10/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	12/22/09	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	02/03/10	<10.0	<4.0	-	<1.0	<1.0	<4.0	<4.0	-	-	<4.0	<4.0	-	<10.0	-	<10.0
Method Blank	06/23/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Method Blank	09/30/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Method Blank	10/29/10	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Method Blank	11/09/11	<10.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Method Blank	03/04/11	<25.0	<4.0	<1.0	<1.0	<1.0	<4.0	<4.0	<1.0	<1.0	<4.0	<4.0	<1.0	<10.0	<1.0	<1.0
Equipment Blank	02/16/05	-	<1.0	-	<0.50	-	-	<5.0	-	-	<5.0	<5.0	-	<5.0	-	<5.0
Equipment Blank	12/29/08	78.1	<4.0	-	<1.0	<1.0	<1.0	<4.0	-	-	21.2	<4.0	-	<10.0	-	<10.0
HRL / HBV	-	700	30	NE	100	30	NE	1000	NE	NE	4000	300	NE	NE	100	100
MCL	-	NE	NE	NE	100	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
NPDES	-	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE

Note: Concentrations in micrograms per liter (µg/L), equivalent to parts per billion

5/3/2011

Results at or below the laboratory method detection limits (MDLs) were preceded by the less than symbol (<).

Analytes not sampled, or results not applicable, were represented with a hyphen (-).

Bolded values exceeded the method detection limit (MDL) for the analyte.

a Health Risk Limit / Health Based Values (Minnesota Department of Health)

b. Maximum Contaminant Levels (Environmental Protection Agency, http://www.epa.gov/safewater/mcl.html#mcls, 3/8/2005)

c. National Pollutant Discharge Elimination System limits only apply to water discharged from CW-4.

J = Analyte detected between the lab reporting limit and method detection limit (J-flag)

TABLE 20A - SOIL GAS ANALYTICAL RESULTS
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location (depth in feet)		Sample Date	Sample Duration	Benzene (ug/m3)	Ethylbenzene (ug/m3)	Toluene (ug/m3)	Total Hydrocarbons as Gas (ug/m3)	1,3,5-Trimethylbenzene (ug/m3)	1,2,4-Trimethylbenzene (ug/m3)	m-& p-Xylene (ug/m3)	o-Xylene (ug/m3)	Method
Soil Vapor Assessment												
VP-1 2' - 0724	1	11/04/04	Grab	**20.5**	18.5	35.2	1,650	<17	<17	<30	<15	TO-15
VP-1 5' - 0633	1	11/04/04	Grab	<11	<15	16.5	<580	<17	<17	<30	<15	TO-15
VP-1A 5' - 0682		10/18/05	Grab	**520**	**16,800**	**5,360**	-	**1,750**	**1,500**	**38,400**	**7,060**	TO-14
VP-2 5' - 0145	1	11/04/04	Grab	**24.4**	53	54.4	5,990	<18	<17	31.8	<16	TO-15
VP-2 16' - 0501	1	11/04/04	Grab	**34.1**	34	105.0	8,290	<17	**44.5**	75.9	27.4	TO-15
VP-3 5' - 0561	1	11/04/04	Grab	<750	**1000**	**880**	72,900	<1100	<1100	<2000	<1000	TO-15
VP-3 19.5' - 0357	1	11/04/04	Grab	<6000	<8100	<7000	16,900,000	<9200	<9000	<16000	<8100	TO-15
VP-4 5' - 0722	1	11/04/04	Grab	**61.4**	39.3	64.4	38,400	<17	**25**	36.2	15.9	TO-15
VP-4 14' - 0088	1	11/04/04	Grab	<45	<61	<53	46,900	<69	<68	<120	<61	TO-15
VP-5 5' - 0354	1	11/04/04	Grab	<12	<16	28.0	10,500	<18	**19.5**	48.1	<16	TO-15
VP-5 14' - 0007	1	11/04/04	Grab	**15.6**	21.6	69.3	3,290	<18	**63.5**	79.5	30.0	TO-15
VP-6 5' - 0324	1	11/04/04	Grab	**23.1**	<16	18.8	4,730	<18	**18.0**	<30	<16	TO-15
VP-6 12' - 0414	1	11/04/04	Grab	**14.6**	19.4	48.7	2,740	<17	**52.0**	75.9	27.8	TO-15
VP-7 8.5' - 0741		04/21/05	Grab	<3.2	5.3	8.4	525	<4.9	**12.0**	21.2	8.4	TO-15
VP-8 5.5' - 0803		04/21/05	Grab	**66.2**	20.7	56.7	2,010	<4.5	**13.5**	32.2	13.2	TO-15
VP-9 5.5' - 0126		04/21/05	Grab	**5.9**	14.6	17.6	677	5.0	**15.5**	26.9	11.9	TO-15
VP-10 6.5' - 0566		04/21/05	Grab	**12.7**	30.9	26.8	1,980	**15.0**	**34.5**	71.5	36.2	TO-15
VP-11 6' - 0425		10/18/05	Grab	<5.3	167	49.7	-	**27.1**	**50.7**	417	48.4	TO-15
VP-11 6' - 1033 (dup)		10/18/05	Grab	**4.5**	42.4	15.9	-	**7.6**	**17.4**	107	15.9	TO-15
VP-12 8' - 0017		02/23/07	Grab	**18.0**	25.2	34.9	-	<3.4	**7.5**	13.8	5.5	TO-15
VP-13 8' - 0147		02/23/07	Grab	**30.4**	18.0	45.7	-	<3.4	**11.9**	22.5	8.4	TO-15

TABLE 20A - SOIL GAS ANALYTICAL RESULTS
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location (depth in feet)		Sample Date	Sample Duration	Benzene	Ethylbenzene	Toluene	Total Hydrocarbons as Gas	1,3,5-Trimethylbenzene	1,2,4-Trimethylbenzene	m-& p-Xylene	o-Xylene	Method
				(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	
QA/QC Samples												
Method Blank: 25167		11/04/04	-	ND	ND	ND	-	ND	ND	ND	ND	TO-15
Method Blank: 81927		04/21/05	-	ND	ND	ND	-	ND	ND	ND	ND	TO-15
Method Blank: 156048		10/18/05	-	ND	ND	ND	-	ND	ND	ND	ND	TO-15
Method Blank: 317227		02/23/07	-	ND	ND	ND	-	ND	ND	ND	ND	TO-15
MDH HRV Acute / *Chronic*	A	-	-	1000 / *1.3 - 4.5*	10000 / *NE*	37000 / *400*	NE	NE	NE	43000t / *NE*	43000t / *NE*	-
EPA Rfc	B			NE	1,000	NE	NE	6	6	700t	700t	-
MDH ISC	C	-	-	NE	NE	NE	NE	NE	NE	NE	NE	-
MPCA Residential ISVs	D			4.5	1000	5000	NE	7	6	100	100	-

Notes: Analytical data reported in micrograms per cubic meter (ug/m3).
Results at or below the laboratory reporting limits (RLs) were preceded by the less than symbol (<).
Concentrations above MPCA screening levels (A through C) are in bold.
A. MDH Health Risk Value (http://www.health.state.mn.us/divs/eh/air/hrvtable.htm, 3/21/05)
B. EPA Reference concentrations
C. MDH Interim Screening Concentration
D. MPCA Residential Intrusion Screening Values

ND - Non-detect
NE - Not Established
1. Sample diluted during laboratory analysis.

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TABLE 20B - OTHER NOTABLE SOIL GAS ANALYTICAL RESULTS
PAYNESVILLE PUBLIC WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Sample Location (depth in feet)		Sample Date	Sample Duration	Acetone	1,3-Butadiene	2-Butanone (MEK)	Cyclohexane	4-Ethyltoluene	Methylene Chloride	n-Heptane	n-Hexane	Propylene	Tetrahydro-furan	Method
				(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	
Soil Vapor Assessment														
VP-1 2' - 0724	1	11/04/04	Grab	54.8	<7.9	20.7	<12	<18	<12	<15	19.7	87.1	<10	TO-15
VP-1 5' - 0633	1	11/04/04	Grab	32.1	<7.9	<11	<12	<18	<12	<15	<13	16.4	<10	TO-15
VP-2 5' - 0145	1	11/04/04	Grab	<9.2	<8.1	<11	<13	<18	<13	37.9	177	<6.1	<11	TO-15
VP-2 16' - 0501	1,3	11/04/04	Grab	280	**99.2**	124	<12	27.5	<12	30.8	53	359	40.8	TO-15
VP-3 5' - 0561	1	11/04/04	Grab	<590	<520	<730	<800	<1200	**4,240**	<960	<840	<390[2]	<690	TO-15
VP-3 19.5' - 0357	1	11/04/04	Grab	<4700	<4100	<5800	<6400	<9300	<6500	<7700	<6700	<3100	<5500	TO-15
VP-4 5' - 0722	1	11/04/04	Grab	321	<7.9	121	<12	<18	<12	<15	<13	227	<10	TO-15
VP-4 14' - 0088	1	11/04/04	Grab	128.0	<31	51.0	261	<71	<49	<58	<51	<24[2]	<42	TO-15
VP-5 5' - 0354	1	11/04/04	Grab	133.0	<8.3	42.0	<13	<19	<13	<15	<14	250[2]	<11	TO-15
VP-5 14' - 0007	1	11/04/04	Grab	161	<8.1	44.7	<13	37	<13	<15	24	268	<11	TO-15
VP-6 5' - 0324	1	11/04/04	Grab	46.1	<8.1	15.6	<13	<18	<13	<15	<13	213	<11	TO-15
VP-6 12' - 0414	1	11/04/04	Grab	101	<7.9	37.8	<12	30.5	<12	<15	<13	<5.9[2]	<10	TO-15
VP-7 8.5' - 0741	3	04/21/05	Grab	4.83	5.85	8.99	<3.4	20.5	<3.5	<4.1	<3.6	<6.6	<2.9	TO-15
VP-8 5.5' - 0803	3	04/21/05	Grab	3.62	**103**	10.5	5.6	13.5	<3.2	15	26.2	341	<2.7	TO-15
VP-9 5.5' - 0126	3	04/21/05	Grab	3.38	**8.77**	8.09	3.85	12	<3	5.42	7.52	12.1	<2.6	TO-15
VP-10 6.5' - 0566	3	04/21/05	Grab	7.49	**21.8**	14.7	25.9	21	<2.6	15	21.9	27.8	<2.2	TO-15
VP-1A 5' - 0682		10/18/05	Grab	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	TO-14
VP-11 6' - 0425	*	10/18/05	Grab	<3.9	<3.7	<4.9	12,900	60.6	<5.8	11,600	**27,800**	<2.8	<4.9	TO-15
VP-11 6' - 1033 (dup)	*	10/18/05	Grab	<0.81	<0.76	<1.0	460	15.6	<1.2	426	964	<0.59	<1.0	TO-15
VP-12 8' - 0017	*, 3	02/23/07	Grab	49.6	9.8	8.20	15.2	3.7	<0.95	21.5	21.7	85.4	13.1	TO-15
VP-13 8' - 0147	*	02/23/07	Grab	104	<0.60	23.6	22.5	6.0	<1.1	24.1	50.1	361	19.6	TO-15
QA/QC Samples														
Method Blank: 25167		11/04/04	-	ND	ND	ND	ND	ND	ND	ND	ND	ND[2]	ND	TO-15
Method Blank: 81927		04/21/05	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	TO-15
Method Blank: 156048		10/18/05	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	TO-15
Method Blank: 317227		02/23/07	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	TO-15
MDH HRV Acute / *Chronic*	A	-	-	NE / *NE*	0.04 / *NE*	NE / *NE*	NE / NE	NE / NE	10,000 / 20	NE / NE	2000 / *NE*	NE / *NE*	NE / *NE*	-
EPA Rfc	B			350	2	1000	NE	NE	NE	NE	200	NE	NE	-
MDH ISC	C	-	-	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	-
MPCA Residential ISVs	D	-	-	31000	0.3	5000	6000	NE	20	NE	2000	3000	NE	-

5/3/11

Notes: Analytical data reported in micrograms per cubic meter (ug/m3).
Results at or below the laboratory reporting limits (RLs) were preceded by the less than symbol (<).
Concentrations above MPCA screening levels (A through C) are in bold.
A. MDH Health Risk Value (http://www.health.state.mn.us/divs/eh/air/hrvtable.htm, 3/21/05)
B. EPA Reference concentrations
C. MDH Interim Screening Concentration
D. MPCA Residential Intrusion Screening Values

ND - Non-detect above RLs.
NE - Not Established
* - Other VOCs Detected (see laboratory report)
1. Sample diluted during laboratory analysis.
2. Initial calibration for this compound is outside of method control limits, therefore results is an estimation.
3. 1,3-Butadiene may have been misidentified

TABLE 20C - RESULTS OF SOIL GAS SAMPLES FOR VAPOR INTRUSION SCREENING
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

SAMPLE LOCATION	VP-12			VP-13									INTRUSION SCREENING VALUES		
DATE SAMPLE	2/23/07			2/23/07											
DEPTH (-#) or HEIGHT (+#) in feet	-8			-8											
PID Reading (ppm)	-			-											
PARAMETERS	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Res. ISV (µg/m3)	Com/Indust. ISV (µg/m3)	Acute ISV (µg/m3)
1,1,1-Trichloroethane	ND	1.5		ND	1.5								5,000	10,000	140000
1,1,2,2-Tetrachloroethane	ND	1.9		ND	1.9								0.2	1	NE
1,1,2-Trichloroethane	ND	1.5		ND	1.5								0.6	2	NE
1,1,2-Trichlorotrifluoroethane	ND	2.1		ND	2.1								30,000	80000	NE
1,1-Dichloroethane	ND	1.1		ND	1.1								500	1000	NE
1,1-Dichloroethene	ND	1.1		ND	1.1								200	600	NE
1,2,4-Trichlorobenzene	ND	1.3		ND	1.3								4	10	NE
1,2,4-Trimethylbenzene	**7.5**	3.4		**11.9**	3.4								7.0	20	NE
1,2-Dibromoethane (EDB)	ND	2.1		ND	2.1								0.02	0.06	NE
1,2-Dichlorobenzene	ND	1.6		ND	1.6								200	600	NE
1,2-Dichloroethane	ND	1.1		ND	1.1								0.4	1	NE
1,2-Dichloropropane	ND	1.3		ND	1.3								4	10	200
1,3,5-Trimethylbenzene	ND	3.4		ND	3.4								6.0	20	NE
1,3-Butadiene	**9.8**	0.60		ND	0.60								0.3	1	NE
1,3-Dichlorobenzene	ND	1.6		ND	1.6								NE	NE	NE
1,4-Dichlorobenzene	ND	1.6		ND	1.6								60	200	10000
2-Butanone (MEK)	8.2	0.80		23.6	0.80								5,000	10,000	10000
2-Hexanone	ND	1.1		ND	1.1								NE	NE	NE
2-Propanol	-	-		-	-								7,000	20,000	3200
4-Ethyltoluene	3.7	3.4		6.0	3.4								NE	NE	NE
4-Methyl-2-pentanone (MIBK)	ND	1.1		13.1	1.1								3,000	8000	NE
Acetone	49.6	0.64	L1, SS	104	6.4	D8, L1, SS							31000	87,000	60000
Benzene	**18.0**	0.87		**30.4**	0.87								4.5	13	1000
Bromodichloromethane	ND	1.9		ND	1.9								NE	NE	NE
Bromoform	ND	2.8		ND	2.8								9	30	NE
Bromomethane	ND	1.1		2.0	1.1								5	10	2000
Carbon disulfide	5.0	0.84		3.4	0.84								700	2,000	6000
Carbon tetrachloride	ND	1.7		ND	1.7								0.7	2	1900
Chlorobenzene	ND	1.3		ND	1.3								50	100	NE
Chloroethane	ND	0.72		ND	0.72								10,000	30,000	100000
Chloroform	ND	1.3		ND	1.3								100	300	150
Chloromethane	ND	0.56		ND	0.56								90	300	1000
Cyclohexane	15.2	0.91		22.5	0.91								6,000	20000	NE
Dibromochloromethane	ND	2.3		ND	2.3								NE	NE	NE
Dichlorodifluoromethane	2.4	1.3		3.4	1.3								200	600	NE
Dichlorotetrafluoroethane	ND	1.9		ND	1.9								NE	NE	NE
Ethanol	-	-		-	-								15,000	42,000	180000
Ethyl acetate	ND	0.98		ND	0.98								3,000	8,000	40000
Ethylbenzene	25.2	1.2		18.0	1.2								1,000	3,000	10000
Hexachloro-1,3-butadiene	ND	2.9		ND	2.9								0.5	1	NE
Methyl-tert-butyl ether	ND	0.98		ND	0.98								3,000	8,000	7000
Methylene Chloride	ND	0.95		ND	0.95								20	60	10000
Naphthalene	**5.1**	3.6		**5.5**	3.6								9	30	NE

TABLE 20C - RESULTS OF SOIL GAS SAMPLES FOR VAPOR INTRUSION SCREENING
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

SAMPLE LOCATION	VP-12			VP-13									INTRUSION SCREENING VALUES		
DATE SAMPLE	2/23/07			2/23/07											
DEPTH (-#) or HEIGHT (+#) in feet	-8			-8											
PID Reading (ppm)	-			-											
PARAMETERS	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Result (µg/m³)	RL (µg/m³)	Q	Res. ISV (µg/m3)	Com/Indust. ISV (µg/m3)	Acute ISV (µg/m3)
Propylene	85.4	0.47	E	361	4.7	D6							3,000	8000	NE
Styrene	1.4	1.2		2.4	1.2								1,000	3,000	21000
Tetrachloroethene	ND	1.9		ND	1.9								20	60	20000
Tetrahydrofuran	13.1	0.80	L1, SS	19.6	0.80	L1, SS							NE	NE	NE
Toluene	34.9	1.0		45.7	1.0								5,000	10,000	37000
Trichloroethene	ND	1.5		ND	1.5								3	8	2000
Trichlorofluoromethane	ND	1.5		ND	1.5								700	2000	NE
Vinyl acetate	ND	0.95		ND	0.95								200	600	NE
Vinyl chloride	ND	0.70		ND	0.70								1	3	180000
cis-1,2-Dichloroethene	ND	1.1		ND	1.1								NE	NE	NE
cis-1,3-Dichloropropene	ND	1.2		ND	1.2								20	60	NE
m&p-Xylene	13.8	2.4		22.5	2.4								100	300	43000
n-Heptane	21.5	1.1		24.1	1.1								NE	NE	NE
n-Hexane	21.7	0.96		50.1	0.96								2,000	6000	NE
o-Xylene	5.5	1.2		8.4	1.2								100	300	43000
trans-1,2-Dichloroethene	ND	1.1		ND	1.1								60	200	800
trans-1,3-Dichloropropene	ND	1.2		ND	1.2								20	60	NE

Notes: Analytical data reported in micrograms per cubic meter (µg/m3).
Results below the laboratory reporting limits (RLs) were preceded by the less than symbol (<) or listed as not detected (ND).
Bold indicates parameter concentration above the respective action level criteria.
NE indicates action levels are not established for the respective parameter.
RL column includes laboratory reporting limits for the respective parameter.
* The action levels shown are for TOTAL Xylenes (combined m&p-Xylene and o-Xylene).
ISV = MPCA Intrusion Screening Value (ISV) (MPCA, Risk-Based Guidance for Vapor Intrusion Pathway 9/08)
Q column includes footnotes for referencing laboratory reporting qualifiers.
D6 = The relative percent difference (RPD) between the sample and the sample duplicate exceeds laboratory control limits.
E = Analyte concentration exceeded the calibration range. The reported result is estimated.
L1 = Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
SS = Analyte did not meet the secondary source verfiication criteria for the initial calibration. The reported result should be considered and estimate.
[1] = Collected using certified canister and 200 cubic centimeter per minute (30 min) flow controller.

TABLE 21 - GROUNDWATER EXTRACTION SYSTEM TOTALS AND MAINTENANCE SUMMARY
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Period		Start Date	End Date	Total Days	Beginning Reading (gallons)	Ending Reading (gallons)	Monthly Total (gallons)	Mean Flow Rate (gpm)	Comments
January 2004		1/1/2004	1/31/2004	30	0	4,104,000	4,104,000	95.0	None
February 2004		1/31/2004	2/29/2004	29	0	3,967,200	3,967,200	95.0	None
March 2004		2/29/2004	3/31/2004	31	0	4,240,800	4,240,800	95.0	None
April 2004		3/31/2004	4/30/2004	30	0	4,104,000	4,104,000	95.0	None
May 2004		5/14/2004	5/31/2004	17	0	2,325,600	2,325,600	95.0	Down from 4/27 to 5/14
June 2004		5/31/2004	6/30/2004	30	0	4,104,000	4,104,000	95.0	None
July 2004		6/30/2004	7/31/2004	31	0	4,240,800	4,240,800	95.0	None
August 2004		7/31/2004	8/31/2004	31	0	4,240,800	4,240,800	95.0	None
September 2004		8/31/2004	9/30/2004	30	0	4,104,000	4,104,000	95.0	None
October 2004		9/30/2004	10/22/2004	22	0	3,231,360	3,231,360	102.0	None
November 2004		10/22/2004	11/10/2004	19	0	2,790,720	2,790,720	102.0	None
December 2004		11/10/2004	12/2/2004	22	0	3,231,360	3,231,360	102.0	None
January 2005		12/2/2004	1/18/2005	47	0	6,903,360	6,903,360	102.0	None
February 2005		1/18/2005	2/16/2005	29	0	4,259,520	4,259,520	102.0	None
March 2005		2/16/2005	3/14/2005	26	0	3,818,880	3,818,880	103.0	None
April 2005		3/14/2005	4/30/2005	47	0	6,903,360	6,903,360	103.0	None
May 2005		4/30/2005	5/31/2005	31	0	4,597,920	4,597,920	103.0	None
June 2005		5/31/2005	6/30/2005	30	0	4,449,600	4,449,600	103.0	None
July 2005		6/30/2005	7/31/2005	31	0	4,597,920	4,597,920	103.0	None
August 2005		7/31/2005	8/31/2005	30	0	4,449,600	4,449,600	103.0	None
September 2005		8/31/2005	9/30/2005	16	0	2,073,600	2,073,600	90.0	off from 8/31 to 9/16 w/ flow now 90 gpm
October 2005		9/30/2005	10/31/2005	31	0	4,017,600	4,017,600	90.0	
November 2005		10/31/2005	11/30/2005	30	0	3,888,000	3,888,000	90.0	59744700 @ 90 gpm on 11/2/05
December 2005		11/30/2005	12/31/2005	31	0	4,017,600	4,017,600	90.0	None
January 2006		12/31/2005	1/31/2006	31	0	4,017,600	4,017,600	90.0	None
February 2006		1/31/2006	2/28/2006	28	0	3,628,800	3,628,800	90.0	None
March 2006		2/28/2006	3/31/2006	31	0	4,017,600	4,017,600	90.0	None, pump failed during 3/06
April 2006		3/31/2006	4/30/2006	30	0	0	0	0.0	Off Line
May 2006		4/30/2006	5/31/2006	31	0	0	0	0.0	Off Line
June 2006		5/31/2006	6/30/2006	30	0	3,888,000	3,888,000	90.0	Pump restarted on 6/1
July 2006		6/30/2006	7/31/2006	31	0	4,464,000	4,464,000	100.0	
August 2006		7/31/2006	8/31/2006	31	0	5,133,600	5,133,600	115.0	RM 8/8/06: 115 gpm 84,476,800 gallons, will adjust to ~100
September 2006		8/31/2006	9/30/2006	30	0	4,320,000	4,320,000	100.0	None
October 2006		9/30/2006	10/31/2006	31	0	4,464,000	4,464,000	100.0	None
November 2006		10/31/2006	11/30/2006	30	0	4,320,000	4,320,000	100.0	None
December 2006		11/30/2006	12/31/2006	31	0	4,464,000	4,464,000	100.0	None
January 2007		12/31/2006	1/31/2007	31	0	4,464,000	4,464,000	100.0	None
February 2007		1/31/2007	2/28/2007	28	0	4,032,000	4,032,000	100.0	None
March 2007		2/28/2007	3/31/2007	31	0	4,464,000	4,464,000	100.0	None

TABLE 21 - GROUNDWATER EXTRACTION SYSTEM TOTALS AND MAINTENANCE SUMMARY
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Period		Start Date	End Date	Total Days	Beginning Reading (gallons)	Ending Reading (gallons)	Monthly Total (gallons)	Mean Flow Rate (gpm)	Comments
April 2007		4/1/2007	4/30/2007	29	0	4,176,000	4,176,000	100.0	None
May 2007		5/1/2007	5/31/2007	30	0	4,320,000	4,320,000	100.0	None
June 2007		6/1/2007	6/30/2007	29	0	4,176,000	4,176,000	100.0	None
July 2007		6/30/2007	7/31/2007	31	0	4,464,000	4,464,000	100.0	None
Augst 2007		7/31/2007	8/31/2007	31	0	4,464,000	4,464,000	100.0	None
September 2007		8/31/2007	9/30/2007	30	0	4,320,000	4,320,000	100.0	None
October 2007		9/30/2007	10/31/2007	31	0	3,571,200	3,571,200	80.0	None
November 2007		10/31/2007	11/30/2007	30	0	3,456,000	3,456,000	80.0	RM 11/7/07: 80 gpm 4,781,000 gal so 104,781,000 gal (total on meter)
December 2007		11/30/2007	12/31/2007	31	0	3,571,200	3,571,200	80.0	None
January 2008		12/31/2007	1/31/2008	31	0	3,571,200	3,571,200	80.0	None
February 2008		1/31/2008	2/29/2008	29	0	3,340,800	3,340,800	80.0	None
March 2008		2/29/2008	3/31/2008	31	0	3,571,200	3,571,200	80.0	None
April 2008		3/31/2008	4/30/2008	30	0	3,456,000	3,456,000	80.0	None
May 2008		4/30/2008	5/31/2008	20	0	1,440,000	1,440,000	50.0	RM/JE 5/20/08: pumping steaming water at ~25 gpm, shutdown after
June 2008		5/31/2008	6/30/2008	3	0	345,600	345,600	80.0	Thein 6/27/08: reinstalled pump with new drop pipe (holes in old pipe)
July 2008		6/30/2008	7/31/2008	31	0	3,571,200	3,571,200	80.0	None
August 2008		7/31/2008	8/31/2008	31	0	3,571,200	3,571,200	80.0	None
September 2008		8/31/2008	9/30/2008	30	0	3,456,000	3,456,000	80.0	None
October 2008		9/30/2008	10/31/2008	31	0	4,017,600	4,017,600	90.0	None
November 2008		10/31/2008	11/30/2008	30	0	4,320,000	4,320,000	100.0	Site visit on 11/10/08: 100 gpm 72,620,400 total on meter
December 2008		11/30/2008	12/31/2008	31	0	4,464,000	4,464,000	100.0	None
January 2009		12/31/2008	1/31/2009	31	0	4,464,000	4,464,000	100.0	None
February 2009		1/31/2009	2/28/2009	28	0	4,032,000	4,032,000	100.0	None
March 2009		2/28/2009	3/31/2009	31	0	4,464,000	4,464,000	100.0	None
April 2009		3/31/2009	4/30/2009	30	0	4,233,600	4,233,600	98.0	Site visit on 4/28/09: 98 gpm 97,087,900 total on meter
May 2009		4/30/2009	5/31/2009	31	0	4,374,720	4,374,720	98.0	None
June 2009		5/31/2009	6/30/2009	30	0	4,233,600	4,233,600	98.0	None
July 2009		6/30/2009	7/31/2009	31	0	4,374,720	4,374,720	98.0	None
August 2009		7/31/2009	8/31/2009	31	0	3,928,320	3,928,320	88.0	Site visit on 8/10/09, 88 gpm 11,965,800 total on meter
September 2009		8/31/2009	9/30/2009	30	0	3,801,600	3,801,600	88.0	None
October 2009		9/30/2009	10/31/2009	31	0	3,928,320	3,928,320	88.0	None
November 2009		10/31/2009	11/30/2009	30	0	3,801,600	3,801,600	88.0	None
December 2009		11/30/2009	12/31/2009	31	0	2,901,600	2,901,600	65.0	Site visit on 12/22/09, 65 gpm 27,357,500 total on meter
January 2010		12/31/2009	1/31/2010	31	0	2,901,600	2,901,600	65.0	None

TABLE 21 - GROUNDWATER EXTRACTION SYSTEM TOTALS AND MAINTENANCE SUMMARY
PAYNESVILLE MUNICIPAL WATER SUPPLY - MPCA
PAYNESVILLE, MINNESOTA 56362
TERRACON PROJECT NO. 41987018

Period		Start Date	End Date	Total Days	Beginning Reading (gallons)	Ending Reading (gallons)	Monthly Total (gallons)	Mean Flow Rate (gpm)	Comments
February 2010		1/31/2010	2/28/2010	28	0	2,620,800	2,620,800	65.0	Snow covered, unable to access flow meter
March 2010		2/28/2010	3/31/2010	31	0	892,800	892,800	20.0	City checked flow rate on 3/31/10 and it was 20 gpm. Pump shut down. Thein removed the pump on 4/8/10 and found holes in the drop pipe and a worn pump. New pump and drop pipe installed on 5/11/10.
April 2010		3/31/2010	4/30/2010	0	0	0	0		
May 2010		5/11/2010	5/31/2010	20	0	2,736,000	2,736,000	95.0	
June 2010		5/31/2010	6/30/2010	30	0	4,104,000	4,104,000	95.0	Site visit on 6/23/10, 90-95 gpm, but couldn't read flow meter.
July 2010		6/30/2010	7/31/2010	31	0	4,240,800	4,240,800	95.0	
August 2010		7/31/2010	8/31/2010	31	0	4,240,800	4,240,800	95.0	
September 2010		8/31/2010	9/30/2010	30	0	4,104,000	4,104,000	95.0	Site visit on 9/30/10, 95 gpm 50296600 total on meter
October 2010		9/30/2010	10/31/2010	31	0	4,240,800	4,240,800	95.0	None, no site visit this quarter
November 2010		10/31/2010	11/30/2010	30	0	4,104,000	4,104,000	95.0	None, no site visit this quarter
December 2010		11/30/2010	12/31/2010	31	0	4,240,800	4,240,800	95.0	None, no site visit this quarter
January 2011		12/31/2010	1/31/2011	31	0	3,571,200	3,571,200	80.0	None
February 2011		1/31/2011	2/28/2011	28	0	3,225,600	3,225,600	80.0	None
March 2011		2/28/2011	3/31/2011	31	0	3,571,200	3,571,200	80.0	Site visit 3/4/11, 80 gpm, 71,479,100 gallons
April 2011		3/31/2011	4/30/2011	30	0	0	0		
May 2011		4/30/2011	5/31/2011	31	0	0	0		
June 2011		5/31/2011	6/30/2011	30	0	0	0		
						Total	327,314,880		

NOTE: THE GROUNDWATER CONTOURS ILLUSTRATED ARE BASED UPON INTERPOLATIONS OF WATER LEVEL DATA OBTAINED FROM THE DEEP MONITORING WELLS ON 10/28/10. ACTUAL CONDITIONS MAY VARY.

LEGEND

- (56) WELL IDENTIFICATION NUMBER
- PRIVATE POTABLE WELLS
- MUNICIPAL POTABLE WELLS
- MONITORING/PIEZOMETER LOCATION
- MW-10D(90) WELL NAME (WELL DEPTH IN FT)
- GROUNDWATER CONTOUR LINE
- [1151.88] GROUNDWATER ELEVATION (FT AMSL)
- GROUNDWATER FLOW DIRECTION

ACMW-2(31) (21)
(22) AEMW-3(27)
DW-1(90) [1152.24]
AGMW-1(43)
DW-2(85) [1153.33]
CW-3(93)
1153
[1153.08] PZ-1
SEALED
CW-4 (110)
JMMW-4(19)
JMMW-5(89)
SEALED
SEALED
SEALED
DW-4(90) [1152.95]
MW-16 (26)
MW-14 (29)
DW-6(45)
DW-5(67)
MW-17 (62)
MW-14D(90) [1153.45]
1154
1152
1151
1150
CW-5 (90)
CMW-42(95)[1149.46]
CMW-43(95) [1149.70]
CW-6 (97)
MW-10D(90) [1153.18]
MW-10(27)
DW-9(31.5)
DW-8S(35)
DW-8(90) [1154.74]
DW-3R(90) [1152.50]
DW-7S (35)
DW-7D (95) [1153.54]
1153
(SEE FIGURES 2A & 2B FOR WELL LOCATIONS)

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

N

0 100 200 400
SCALE IN FEET

Project Mngr: PJW	Project No. 41987018	Terracon	GROUNDWATER CONTOUR MAP (10/28/10)
Drawn By: JLM (41)	Scale: AS SHOWN		PAYNESVILLE MUNICIPAL WATER SUPPLY
Checked By: CDB	File No. 41987018.02.dwg		MPCA
Approved By: PJW	Date: 5/17/2011		MINNESOTA HIGHWAY 23

PAYNESVILLE

FIG. No. 3A (GW 10.28.10)

NOTE: THE GROUNDWATER CONTOURS ILLUSTRATED ARE BASED UPON INTERPOLATIONS OF WATER LEVEL DATA OBTAINED FROM WELLS ON 3/1/11. WATER LEVEL DATA COLLECTED FROM DW-2 ON 3/3/11. ACTUAL CONDITIONS MAY VARY.

LEGEND

- WELL IDENTIFICATION NUMBER
- PRIVATE POTABLE WELLS
- MUNICIPAL POTABLE WELLS
- MONITORING/PIEZOMETER LOCATION
- MW-10D(90) WELL NAME (WELL DEPTH IN FT)
- GROUNDWATER CONTOUR LINE
- [1153.34] GROUNDWATER ELEVATION (FT AMSL)
- GROUNDWATER FLOW DIRECTION

ACMW-2(31)
AEMW-3(27)
AGMW-1(43)
DW-1(90) [1151.76]
CW-3(93)
DW-2(85) [1154.13]
[1153.17] PZ-1
SEALED
CW-4 (110)
JMMW-4(19)
JMMW-5(89)
SEALED
MW-16 (26)
MW-14 (29)
DW-6(45)
DW-5(67)
MW-17 (62)
MW-14D(90) [1151.96]
SEALED
DW-4(90) [1152.07]
SEALED
CW-5 (90)
CMW-42(95) [1149.02]
CMW-43(95) [1149.13]
CW-6 (97)
MW-10D(90) [1151.64]
MW-10(27)
DW-9(31.5)
DW-8S(35)
DW-8(90) [1152.04]
DW-3R(90) [1150.87]
DW-7S (35)
DW-7D (95) [1151.99]
1154
1153
1152
1151
1150

(SEE FIGURES 2A & 2B FOR WELL LOCATIONS)

N

0 100 200 400
SCALE IN FEET

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

Project Mngr: PJW	Project No. 41987018
Drawn By: JLM (41)	Scale: AS SHOWN
Checked By: CDB	File No 41987018gw.02.
Approved By: PJW	Date: 5/17/2

Terracon

GROUNDWATER CONTOUR MAP (3/1/11)

PAYNESVILLE MUNICIPAL WATER SUPPLY

MPCA

MINNESOTA HIGHWAY 23

PAYNESVILLE TA

FIG. No. 3B

(GW 3.1.11)

NOTE: THE INFERRED EXTENT OF BENZENE IMPACTS DEPICTED IS BASED UPON INTERPOLATION AND EXTRAPOLATION OF BENZENE CONCENTRATIONS IN GROUNDWATER SAMPLES COLLECTED FROM THE WELLS SHOWN DURING THE OCTOBER 2010 SAMPLING EVENT OR MOST RECENT SAMPLING EVENT (SEE TABLE 11). DATA FROM DW-8S, MW-16, AND MW-17 NOT USED TO PREPARE THIS MAP. ACTUAL CONDITIONS MAY VARY.

ACMW-2(31)
AEMW-3(27)
AGMW-1(43)
DW-1(90) [<1.0]
DW-2(85) [<1.0]
CW-3(93) [<1.0]
SEALED
PZ-1
[<1.0]
CW-4 (110)
JMMW-4(19)
JMMW-5(89)
SEALED
SEALED
SEALED
[<1.0]
MW-16 (26)
[9.3]
DW-6(45)
MW-14 (29) [<1.0]
MW-14D(90) [<1.0]
DW-5(67) [51.5]
MW-17 (62) [<1.0]
DW-4(90) [<1.0]
CW-5 (90) [<1.0]
CMW-42(95)
CMW-43(95)
CW-6 (97) [<1.0]
MW-10D(90) [<1.0]
MW-10(27) [<1.0]
DW-9(31.5) [924]
DW-8S(35) [<1.0]
DW-8(90) [9.4]
DW-3R(90) [<1.0]
DW-7S (35) [<1.0]
DW-7D (95) [<1.0]
1.0 µg/L BENZENE
(SEE FIGURES 2A & 2B FOR WELL LOCATIONS)

LEGEND

(56)	WELL IDENTIFICATION NUMBER
MW-10D(90)	WELL NAME (WELL DEPTH IN FT)
[<1.0]	BENZENE CONCENTRATION IN µg/L
	MUNICIPAL POTABLE WELLS
	PRIVATE POTABLE WELLS
	MONITORING/PIEZOMETER LOCATION

N

0 100 200 400
SCALE IN FEET

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

Project Mngr:	PJW
Drawn By:	JLM (41)
Checked By:	PJW
Approved By:	PJW
Project No.	41987018
Scale:	AS SHOWN
File No	41987018gw.02.dw
Date:	5/04/20

Terracon

BENZENE CONCENTRATION MAP (OCTOBER 2010)

PAYNESVILLE MUNICIPAL WATER SUPPLY

MPCA

MINNESOTA HIGHWAY 23

PAYNESVILLE OTA

FIG. No.

7A

(FIG7A)

NOTE: THE INFERRED EXTENT OF BENZENE IMPACTS DEPICTED IS BASED UPON INTERPOLATION AND EXTRAPOLATION OF BENZENE CONCENTRATIONS IN GROUNDWATER SAMPLES COLLECTED FROM THE WELLS SHOWN DURING THE MARCH 2011 SAMPLING EVENT OR MOST RECENT SAMPLING EVENT (SEE TABLE 11). DATA FROM DW-8S, DW-9, MW-16, AND MW-17 NOT USED TO PREPARE THIS MAP. ACTUAL CONDITIONS MAY VARY.

ACMW-2(31)
AEMW-3(27)
AGMW-1(43)
DW-1(90) [<1.0]
DW-2(85) [<1.0]
CW-3(93) [<1.0]
SEALED
PZ-1
CW-4 (110) [0.74]
JMMW-4(19)
JMMW-5(89)
MW-16 (26) [<1.0]
MW-14 (29) [<1.0]
DW-6(45)
DW-5(67) [20.4]
MW-17 (62) [<1.0]
MW-14D(90) [<1.0]
DW-4(90)
CW-5 (90) [<1.0]
CMW-42(95)
CMW-43(95)
CW-6 (97) [<1.0]
MW-10D(90) [<1.0]
MW-10(27) [<1.0]
DW-9(31.5) [<1.0]
DW-8S(35) [<1.0]
DW-8(90) [8.5]
DW-3R(90) [<1.0]
[<1.0] DW-7S (35)
[<1.0] DW-7D (95)
(SEE FIGURES 2A & 2B FOR WELL LOCATIONS)

LEGEND

(50)	WELL IDENTIFICATION NUMBER
MW-10D(90)	WELL NAME (WELL DEPTH IN FT)
[<1.0]	BENZENE CONCENTRATION IN µg/L
	MUNICIPAL POTABLE WELLS
	PRIVATE POTABLE WELLS
	MONITORING/PIEZOMETER LOCATION

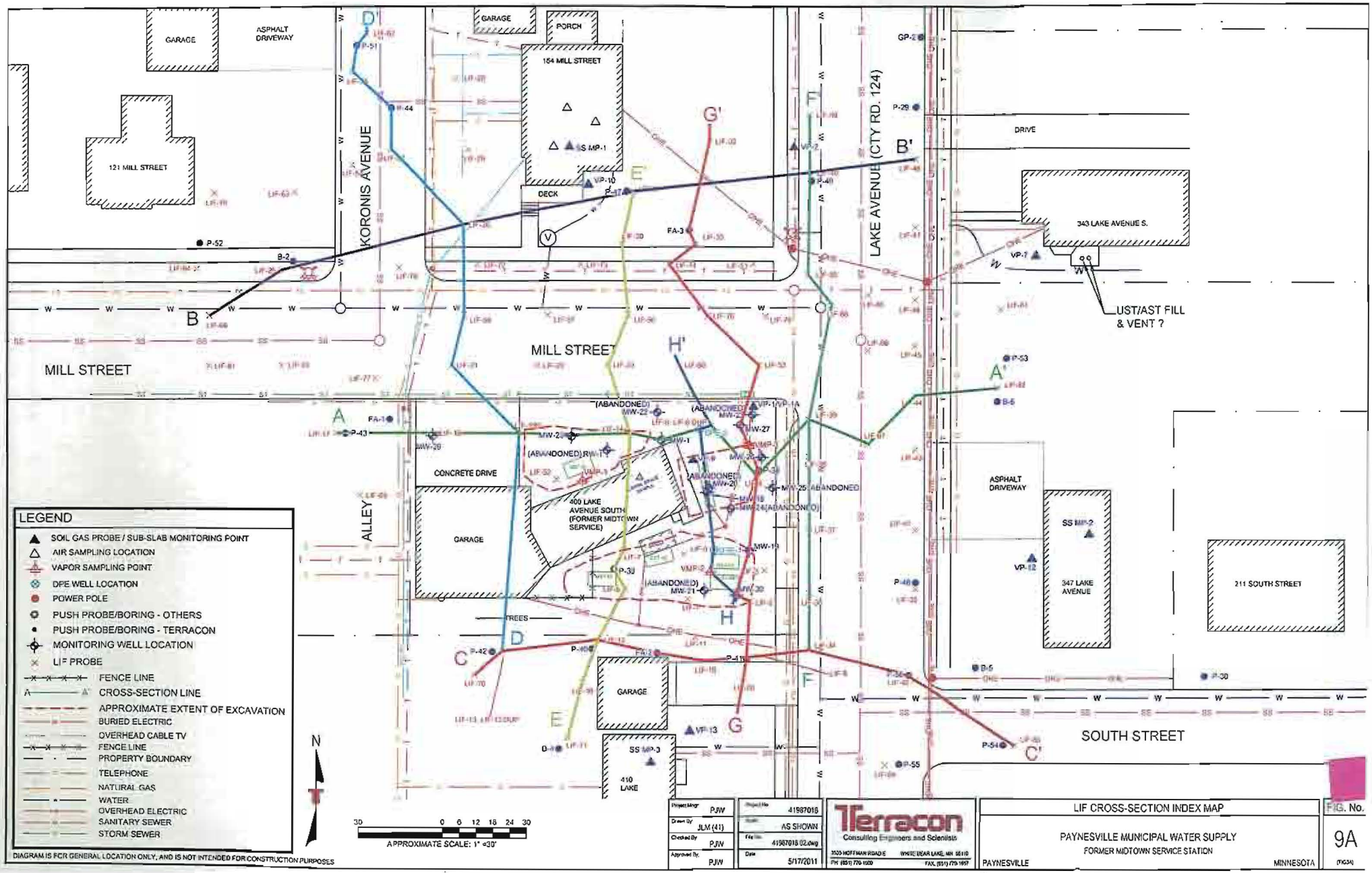
N

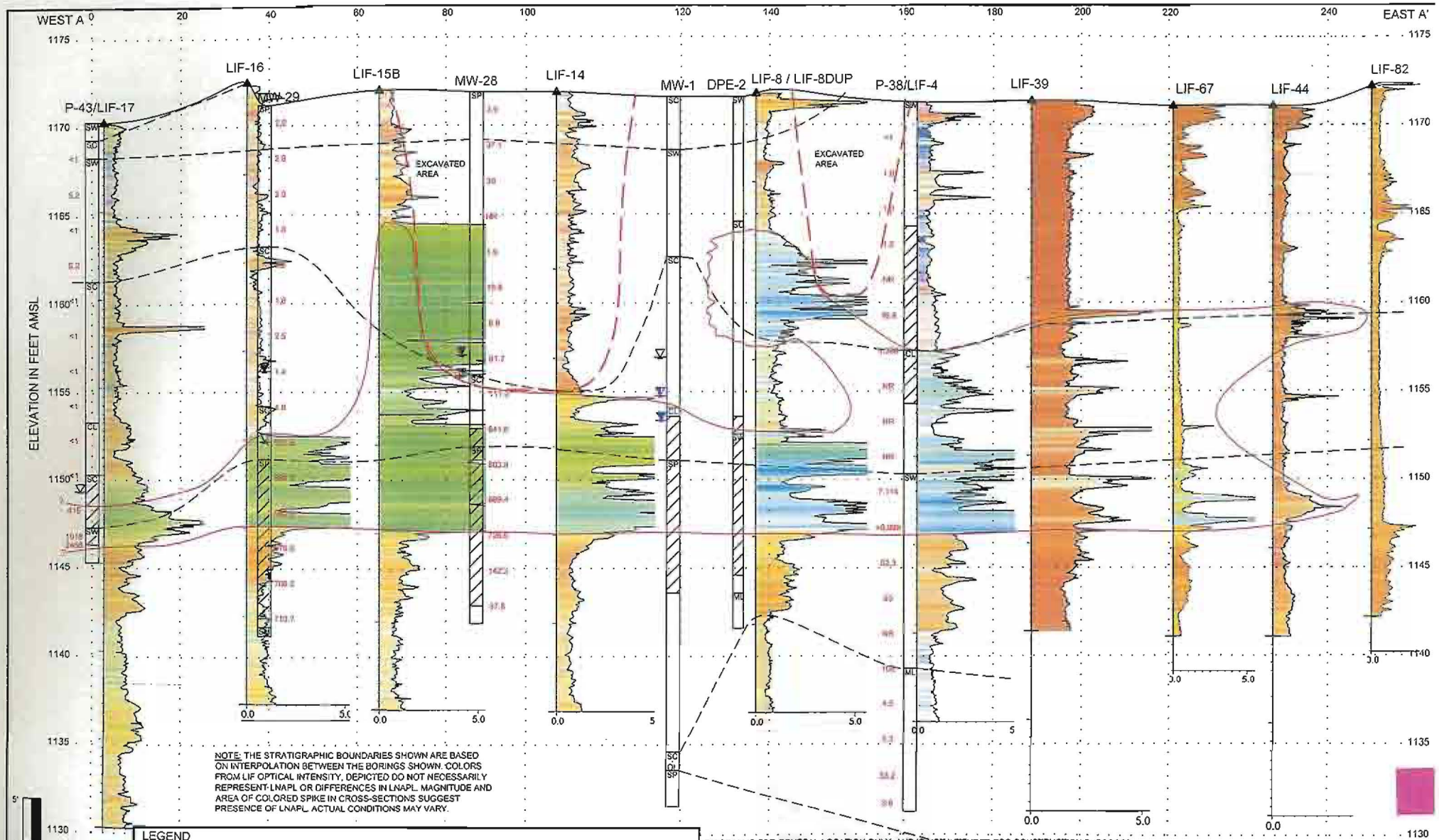
0 100 200 400
SCALE IN FEET

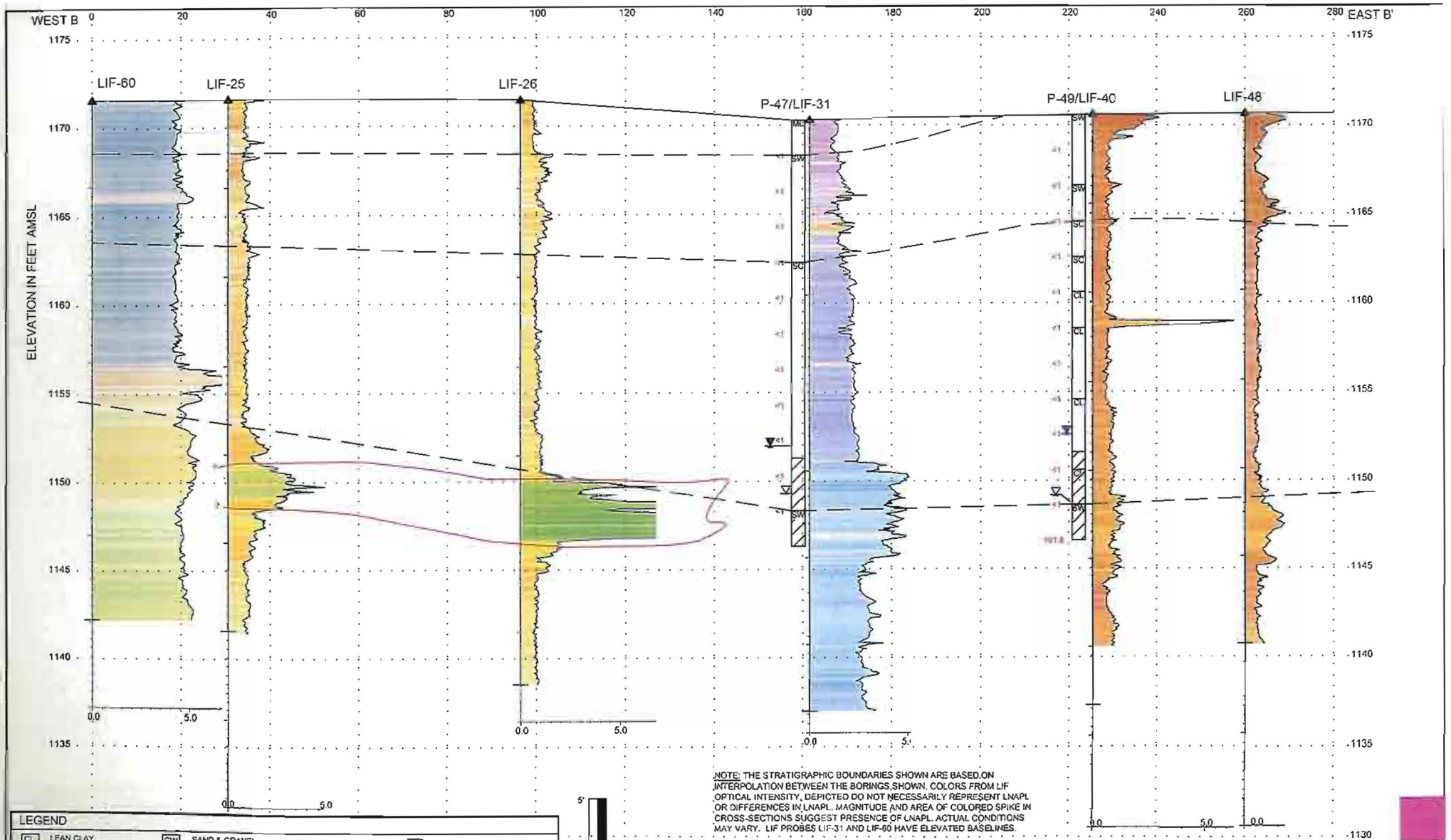
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

Project Mngr: PJW	Project No. 41987018	Terracon Consulting Engineers and Scientists	BENZENE CONCENTRATION MAP (MARCH 2011)
Drawn By: JLM (41)	Scale: AS SHOWN		PAYNESVILLE MUNICIPAL WATER SUPPLY
Checked By: PJW	File No 41987018gw.02.[illegible]		MPCA
Approved By: PJW	Date: 5/05/2[illegible]		MINNESOTA HIGHWAY 23
			PAYNESVILLE [illegible]TA

FIG. No. 7B (FIG7B)


GARAGE
ASPHALT DRIVEWAY
121 MILL STREET
KORONIS AVENUE
154 MILL STREET
PORCH
DECK
SS MP-1
MILL STREET
LAKE AVENUE (CTY RD. 124)
DRIVE
343 LAKE AVENUE S.
UST/AST FILL & VENT ?
CONCRETE DRIVE
ALLEY
400 LAKE AVENUE SOUTH (FORMER MIDTOWN SERVICE)
ASPHALT DRIVEWAY
SS MP-2
347 LAKE AVENUE
211 SOUTH STREET
TREES
410 LAKE
SS MP-3
SOUTH STREET
LEGEND
SOIL GAS PROBE / SUB-SLAB MONITORING POINT
AIR SAMPLING LOCATION
VAPOR SAMPLING POINT
DPE WELL LOCATION
POWER POLE
PUSH PROBE/BORING - OTHERS
PUSH PROBE/BORING - TERRACON
MONITORING WELL LOCATION
LIF PROBE
FENCE LINE
CROSS-SECTION LINE
APPROXIMATE EXTENT OF EXCAVATION
BURIED ELECTRIC
OVERHEAD CABLE TV
FENCE LINE
PROPERTY BOUNDARY
TELEPHONE
NATURAL GAS
WATER
OVERHEAD ELECTRIC
SANITARY SEWER
STORM SEWER
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES
N
30 0 6 12 18 24 30
APPROXIMATE SCALE: 1" =30'
Project Mngr PJW
Drawn By JLM (41)
Checked By PJW
Approved By PJW
Project No 41987018
Scale AS SHOWN
File No 41987018 02.dwg
Date 5/17/2011
Terracon
Consulting Engineers and Scientists
3535 HOFFMAN ROADE WHITE BEAR LAKE, MN 55110
PH (651) 770-1500 FAX (651) 770-1697
LIF CROSS-SECTION INDEX MAP
PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION
PAYNESVILLE MINNESOTA
FIG. No.
9A


WEST A
EAST A'
ELEVATION IN FEET AMSL
P-43/LIF-17
LIF-16
MW-29
LIF-15B
MW-28
LIF-14
MW-1
DPE-2
LIF-8 / LIF-8DUP
P-38/LIF-4
LIF-39
LIF-67
LIF-44
LIF-82
EXCAVATED AREA
EXCAVATED AREA
NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.
APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X
LEGEND
CL LEAN CLAY
SP SAND, POORLY GRADED
SC SANDY CLAY
SW SAND, WELL GRADED
ML SILT
GW SAND & GRAVEL
SCREENED PORTION OF MW
EXTENT OF EXCAVATION
GROUNDWATER ELEVATION (HIGH)
GROUNDWATER ELEVATION (LOW)
GROUNDWATER ELEVATION (AVERAGE)
PID IN PARTS PER MILLION (PPM) < LESS THAN
INFERRED EXTENT OF LNAPL
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES
Project Mngr PJW
Drawn By JLM (AI)
Checked By PJW
Approved By PJW
Project No 41987018
Scale AS SHEET
File No 41987018cs.01.dwg
Date 5/08/2011
Terracon
Consulting Engineers and Scientists
LIF CROSS-SECTION A-A'
PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION
PAYNESVILLE
MINNESOTA
FIG. No
9B



NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL. MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY. LIF PROBES LIF-31 AND LIF-60 HAVE ELEVATED BASELINES.

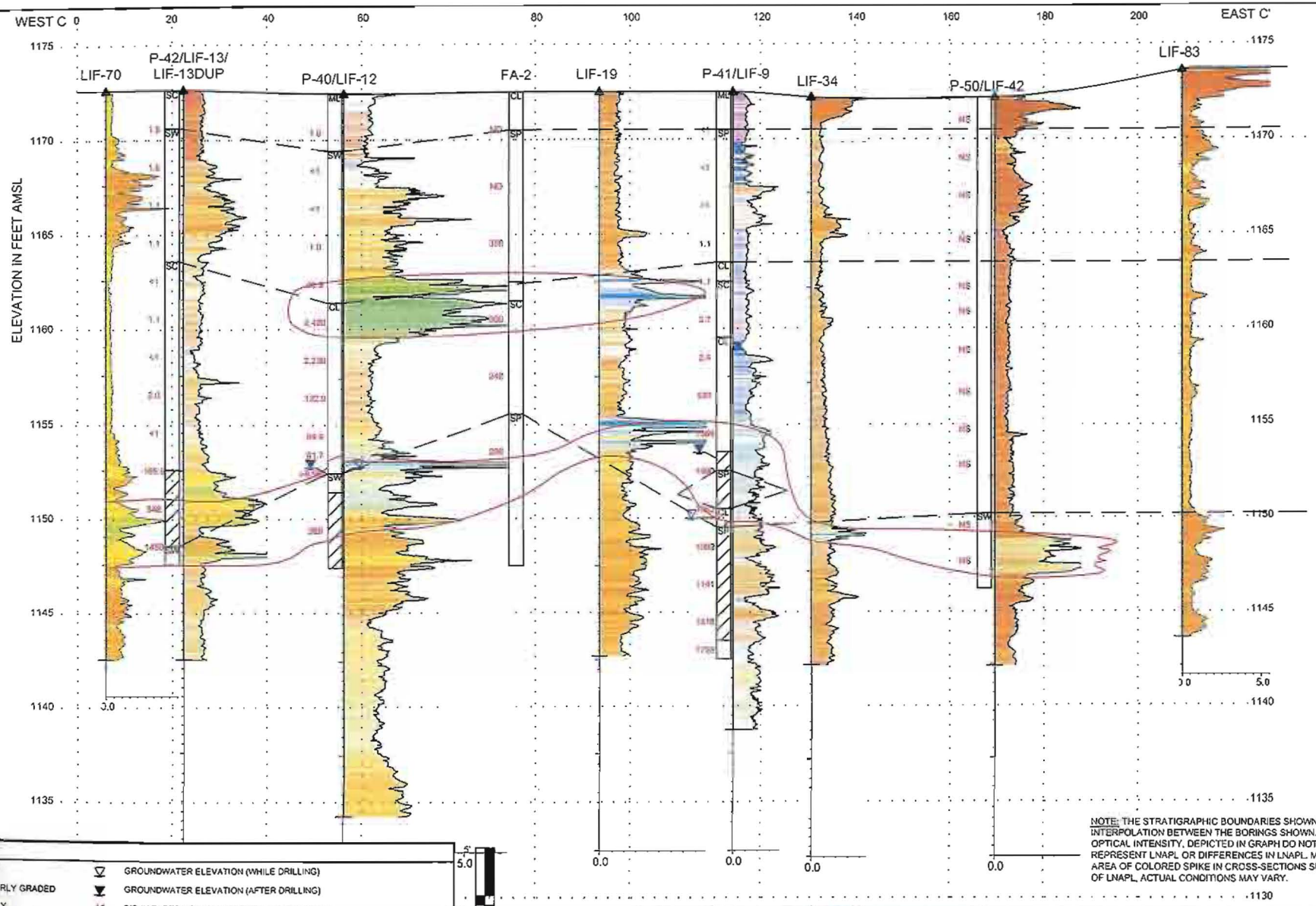
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

LEGEND

CL	LEAN CLAY	GW	SAND & GRAVEL		SCREENED PORTION OF MW
SP	SAND, POORLY GRADED	▽	GROUNDWATER ELEVATION (WHILE DRILLING)		INFERRED EXTENT OF LNAPL
SC	SANDY CLAY	▼	GROUNDWATER ELEVATION (AFTER DRILLING)		
SW	SAND, WELL GRADED	17	PID IN PARTS PER MILLION (PPM) < LESS THAN		
ML	SILT				

5' 0 20'
APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

Project Mgr PJW	Project No 41987018	Terracon Consulting Engineers and Scientists	LIF CROSS-SECTION B-B'
Drawn By JLM (41)	Scale AS SHOWN	2020 HOFFMAN ROADS WHITE BEAR LAKE, MN 55110 PH (651) 770-1500 FAX (651) 770-1557	PAYNESVILLE MUNICIPAL WATER SUPPLY FORMER MIDTOWN SERVICE STATION PAYNESVILLE MINNESOTA
Checked By PJW	File No 41987018cs 01.dwg		FIG. No. 9C
Approved By PJW	Date 5/05/2011		



NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED IN GRAPH DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL. MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.

LEGEND

CL	LEAN CLAY	▽	GROUNDWATER ELEVATION (WHILE DRILLING)
SP	SAND, POORLY GRADED	▼	GROUNDWATER ELEVATION (AFTER DRILLING)
SC	SANDY CLAY	17	PID IN PARTS PER MILLION (PPM) < LESS THAN
SW	SAND, WELL GRADED	▨	SCREENED PORTION OF MW
ML	SILT	—	INFERRED EXTENT OF LNAPL
GW	SAND & GRAVEL		

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

0 5' 20'
APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

Project Mngr	PJW
Drawn By	JLM (41)
Checked By	PJW
Approved By	PJW
Project No.	41987018
Scale	AS SHOWN
File No.	41987018LIF cs2.dwg
Date	5/05/2011

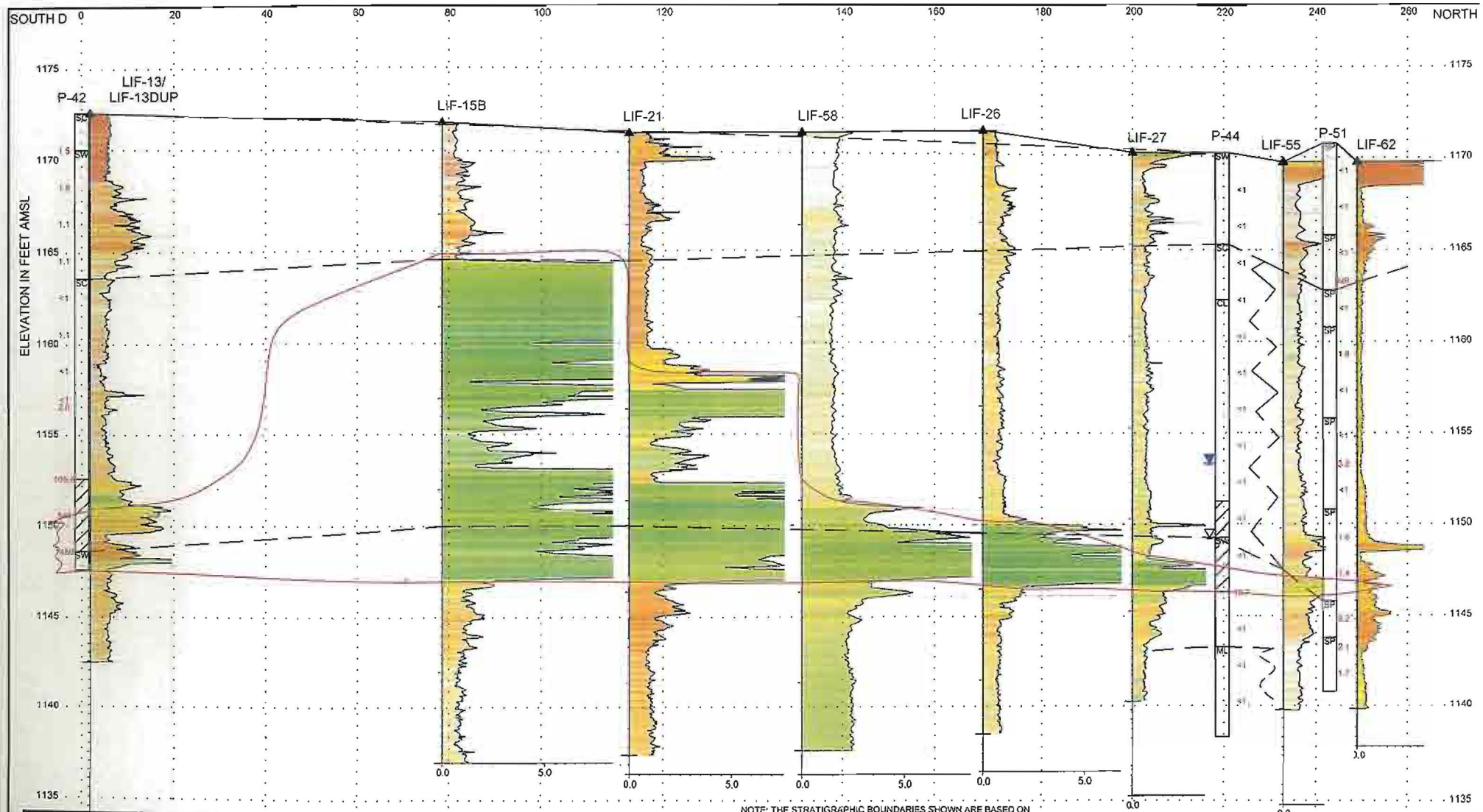
Terracon
Consulting Engineers and Scientists
3535 HOFFMAN ROAD E WHITE BEAR LAKE, MN 55110
PH (651) 770-1500 FAX (651) 770-1667

LIF CROSS-SECTION C-C'

PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION

PAYNESVILLE MINNESOTA

FIG. No. 9D



LEGEND

- CL LEAN CLAY
- SP SAND, POORLY GRADED
- SC SANDY CLAY
- SW SAND, WELL GRADED
- ML SILT
- GW SAND & GRAVEL
- GROUNDWATER ELEVATION (WHILE DRILLING)
- GROUNDWATER ELEVATION (AFTER DRILLING)
- PID IN PARTS PER MILLION (PPM) < LESS THAN
- SCREENED PORTION OF MW
- INFERRED EXTENT OF LNAPL

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

APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL. MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.

Project Mngr	PJW
Drawn By	JLM (41)
Checked By	PJW
Approved By	PJW
Project No	41997018
Scale	AS SHOWN
File No	41997018LIF-xc2.dwg
Date	5/05/2011

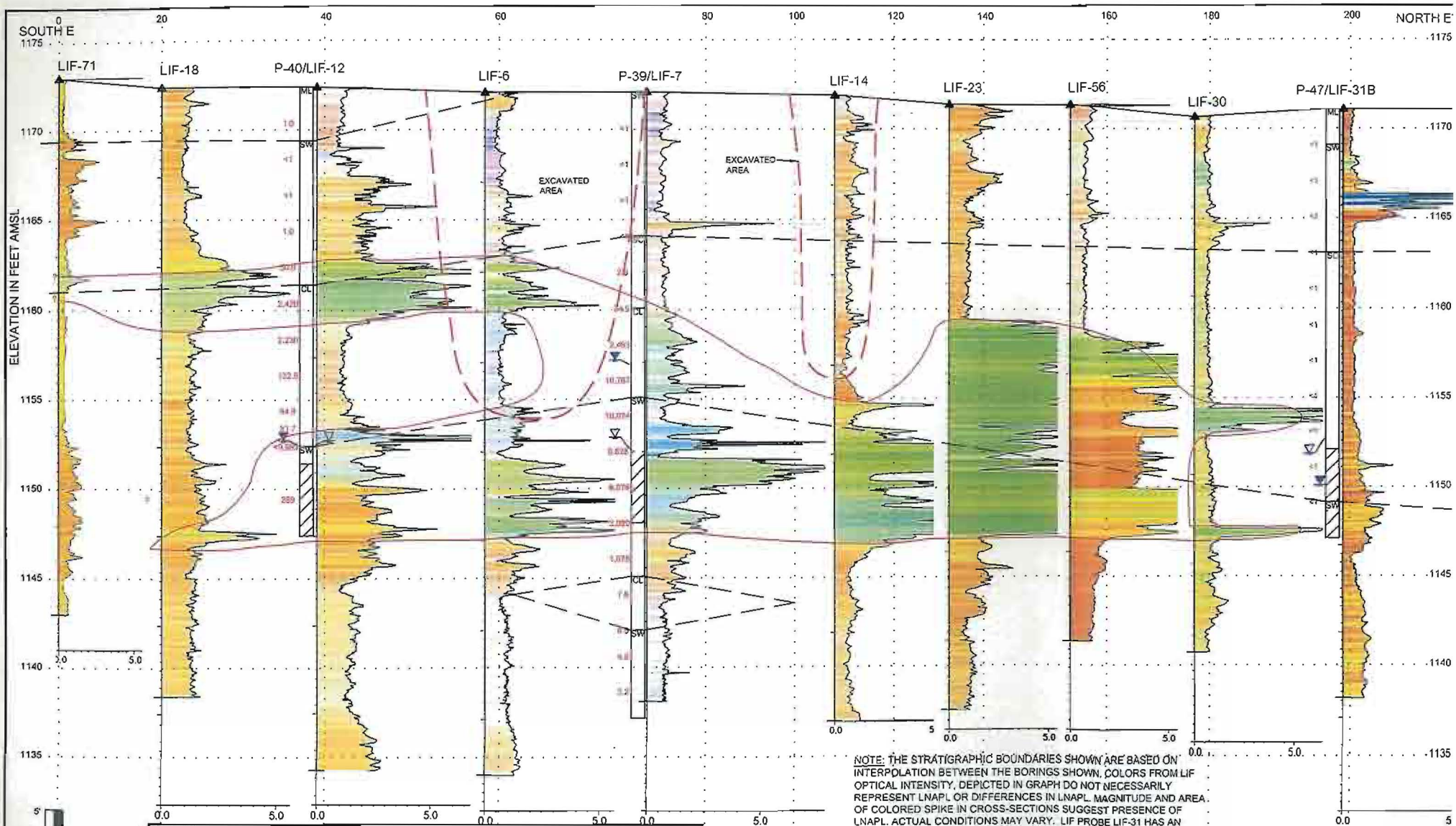
Terracon
Consulting Engineers and Scientists
3535 HOFFMAN ROAD E WHITE BEAR LAKE, MN 55110
PH (651) 770-1500 FAX (651) 770-1657

LIF CROSS-SECTION D-D'

PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION

PAYNESVILLE MINNESOTA

FIG. 9E



NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED IN GRAPH DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY. LIF PROBE LIF-31 HAS AN ELEVATED BASE LINE.

APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

LEGEND

CL	LEAN CLAY	GW	SAND & GRAVEL
SP	SAND, POORLY GRADED	▽	GROUNDWATER ELEVATION (WHILE DRILLING)
SC	SANDY CLAY	▼	GROUNDWATER ELEVATION (AFTER DRILLING)
SW	SAND, WELL GRADED	17	PID IN PARTS PER MILLION (PPM) < LESS THAN
ML	SILT		

SCREENED PORTION OF MW

INFERRED EXTENT OF LNAPL

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

Project Mngr	PJW	Project No	41987018
Drawn By	JLM (41	Scale	AS SHOWN
Checked By	PJW	File No	41987018LIF cs 01.dwg
Approved By	PJW	Date	5/05/2011

Terracon
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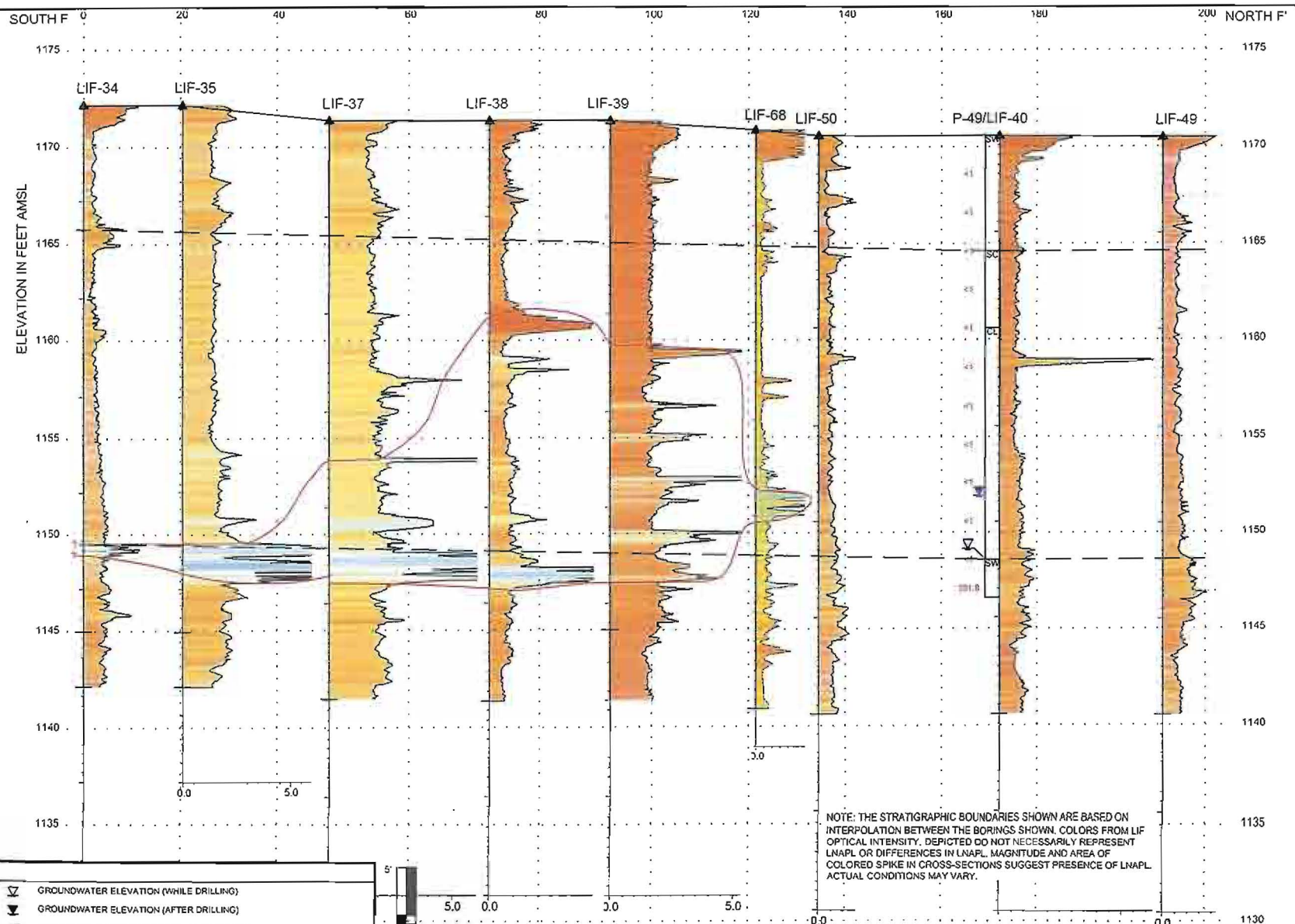
LIF CROSS-SECTION E-E'

PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION

PAYNESVILLE MINNESOTA

9F
(FIGURE)



NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.

LEGEND

CL	LEAN CLAY	▽	GROUNDWATER ELEVATION (WHILE DRILLING)
SP	SAND, POORLY GRADED	▼	GROUNDWATER ELEVATION (AFTER DRILLING)
SC	SANDY CLAY	17	PID IN PARTS PER MILLION (PPM) < LESS THAN
SW	SAND, WELL GRADED	▨	SCREENED PORTION OF MW
ML	SILT	—	INFERRED EXTENT OF LNAPL
GW	SAND & GRAVEL		

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

5' 0 5.0 20'

APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

Project Mgr	PJW
Drawn By	JLM (41)
Checked By	PJW
Approved By	PJW
Project No	41987018
Scale	AS SHOWN
File No	41987018LIF.CS2
Date	5/05/2011

Terracon
Consulting Engineers and Scientists
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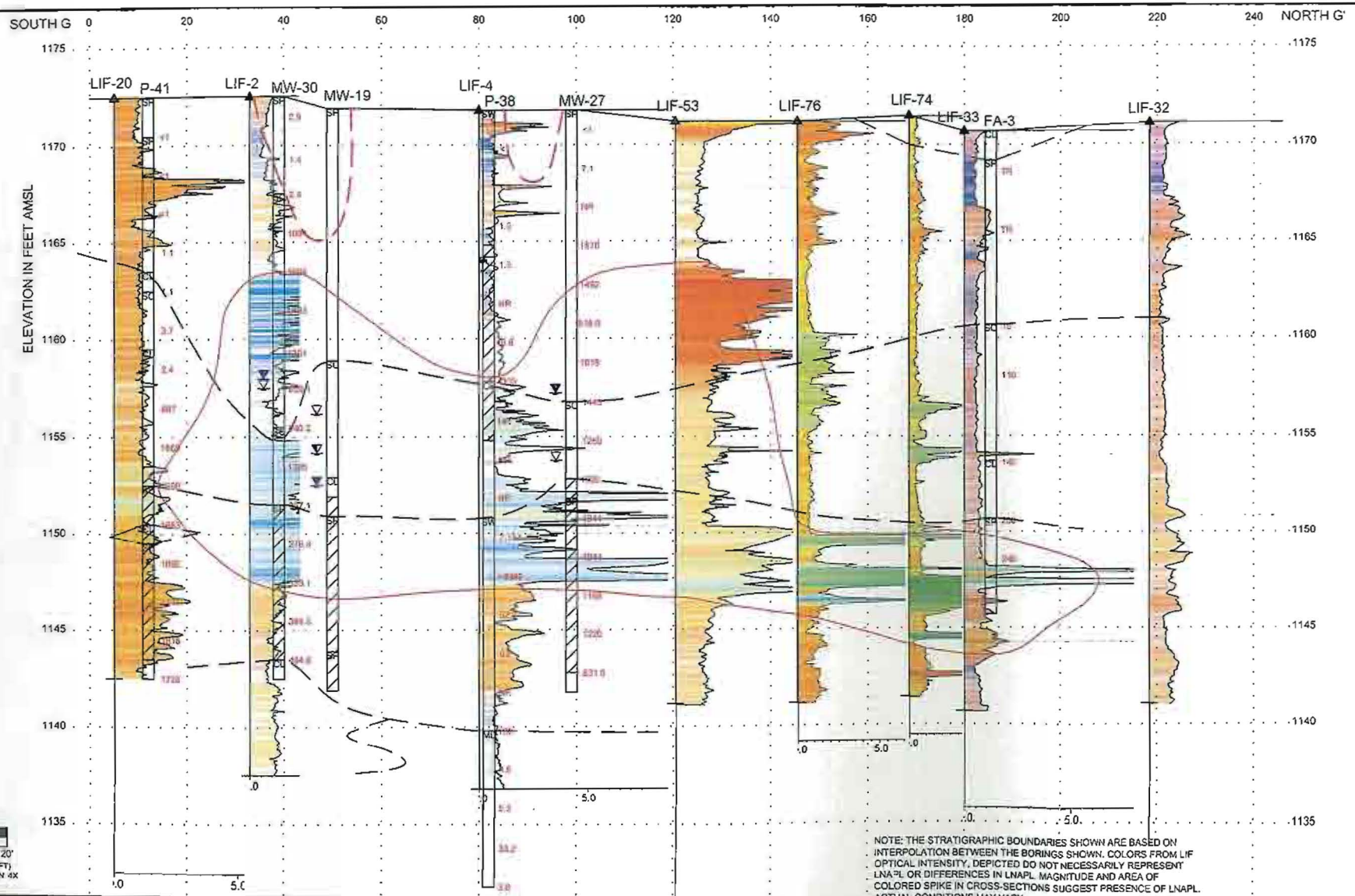
LIF CROSS-SECTION F-F'

PAYNESVILLE MUNICIPAL WATER SUPPLY
FORMER MIDTOWN SERVICE STATION

PAYNESVILLE MINNESOTA

FIG. No 9G



NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.

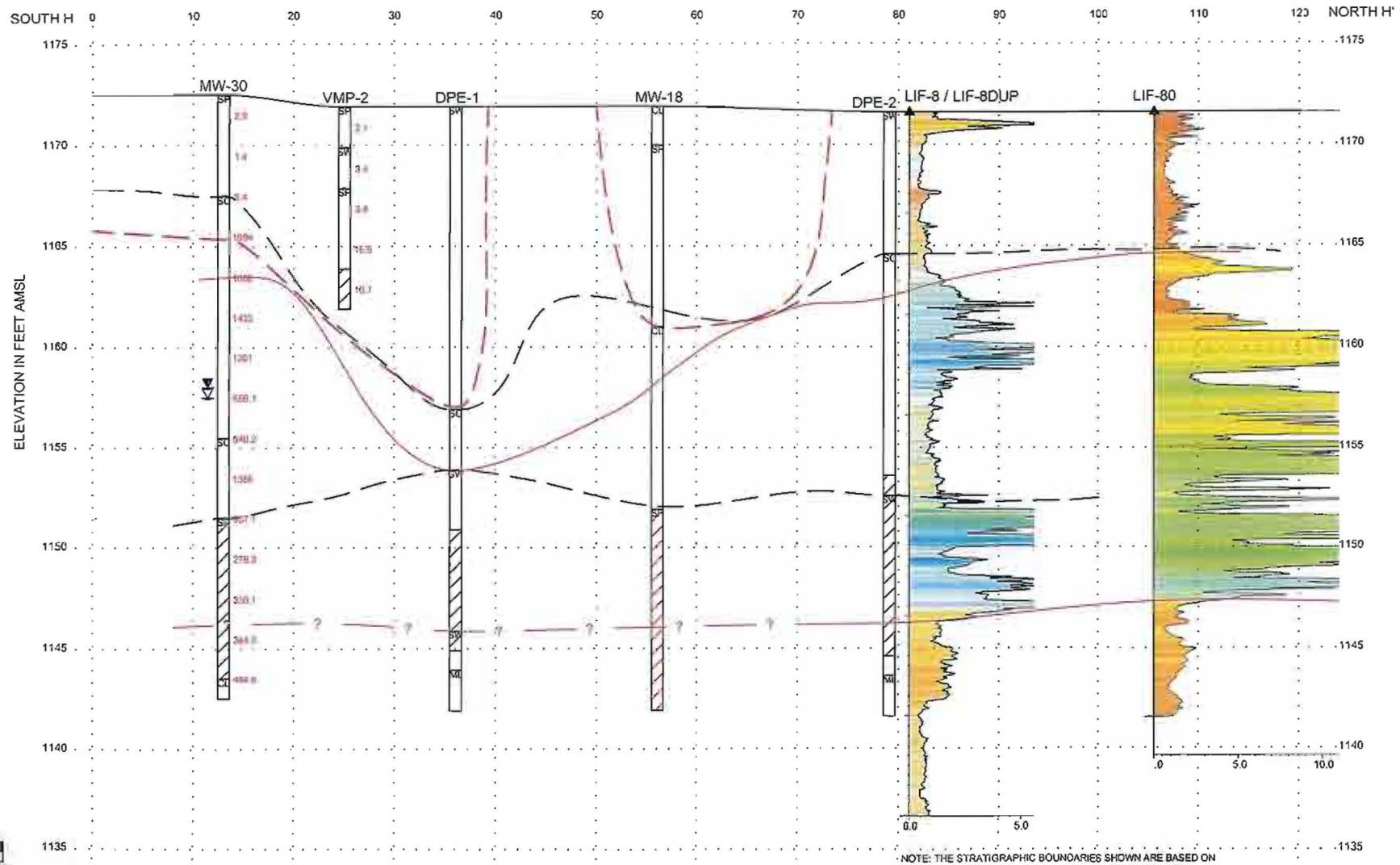
DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

LEGEND

- CL LEAN CLAY
- SP SAND, POORLY GRADED
- SC SANDY CLAY
- SW SAND, WELL GRADED
- ML SILT
- GW SAND & GRAVEL
- GROUNDWATER ELEVATION (HIGH)
- GROUNDWATER ELEVATION (LOW)
- GROUNDWATER ELEVATION (AVERAGE)
- 17 PID IN PARTS PER MILLION (PPM) < LESS THAN
- SCREENED PORTION OF MW
- INFERRED EXTENT OF LNAPL
- EXTENT OF EXCAVATION

Project Mngr PJW	Project No 41987018	Terracon Consulting Engineers and Scientists	LIF CROSS-SECTION G-G'
Drawn By JLM (41)	Scale AS SHOWN	3535 HOFFMAN ROAD WHITE BEAR LAKE, MN 55110 Ph: (651) 770-1500 FAX: (651) 770-1657	PAYNESVILLE MUNICIPAL WATER SUPPLY
Checked By PJW	File No 41987018cs2.dwg		FORMER MIDTOWN SERVICE STATION
Approved By PJW	Date 6/05/2011		PAYNESVILLE MINNESOTA

FIG. No. 9H



5'
0
10'
APPROXIMATE SCALE (FT)
VERTICAL EXAGGERATION 4X

NOTE: THE STRATIGRAPHIC BOUNDARIES SHOWN ARE BASED ON INTERPOLATION BETWEEN THE BORINGS SHOWN. COLORS FROM LIF OPTICAL INTENSITY, DEPICTED DO NOT NECESSARILY REPRESENT LNAPL OR DIFFERENCES IN LNAPL MAGNITUDE AND AREA OF COLORED SPIKE IN CROSS-SECTIONS SUGGEST PRESENCE OF LNAPL. ACTUAL CONDITIONS MAY VARY.

LEGEND

- CL LEAN CLAY
- SP SAND, POORLY GRADED
- SC SANDY CLAY
- SW SAND, WELL GRADED
- ML SILT
- GW SAND & GRAVEL
- GROUNDWATER ELEVATION (HIGH)
- GROUNDWATER ELEVATION (LOW)
- GROUNDWATER ELEVATION (AVERAGE)
- PID IN PARTS PER MILLION (PPM) < LESS THAN
- SCREENED PORTION OF MW
- INFERRED EXTENT OF LNAPL
- EXTENT OF EXCAVATION

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

Project Mngr PJW	Project No 41987018	Terracon Consulting Engineers and Scientists	LIF CROSS-SECTION H-H'
Drawn By JLM (41)	Scale AS SHOWN	3535 HOFFMAN ROAD E WHITE BEAR LAKE, MN 55110 PH (651) 770-1500 FAX (651) 770-1657	PAYNESVILLE MUNICIPAL WATER SUPPLY
Checked By PJW	File No. 41987018cs2.dwg		FORMER MIDTOWN SERVICE STATION
Approved By PJW	Date 5/05/2011		PAYNESVILLE MINNESOTA

FIG. N
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