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November 2, 2007

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Mr. Steven Faryan
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Re: Quarterly Groundwater Monitoring Report – July 2007
The Hartford Area Hydrocarbon Plume Site/Hartford, Illinois
ILR000128249 – Madison County – LPC 1190505040
URS Project No. 21561445

Dear Messrs. Turner and Faryan:

URS Corporation (URS), on behalf of the Hartford Working Group (HWG), and as presented in the January 4, 2006 Dissolved Phase Groundwater Investigation Report, is submitting this Quarterly Groundwater Monitoring Report for the 3rd Quarter of 2007. The activities presented in this report were completed in accordance with the Dissolved Phase Groundwater Investigation Report.

The extent of the dissolved phase plume appears to be defined within the available area of investigation. The findings of the investigation are generally consistent with the flow of groundwater in this area. The plume is bounded by approximately Hawthorne Street to the south and along portions of Illinois Route 3 to the west. The Hartford Municipal Wells have not been impacted by the LNAPL.

Based on historical general chemistry and natural attenuation data, the HWG proposes to reduce the 2008 sampling frequency for these parameters from quarterly to annually (4th quarter only). These modifications are based on the general consistency of groundwater concentration data over the course of monitoring. Future sampling of these parameters may be re-evaluated based on documented changes in groundwater concentration trends or the general conceptual site model.

An evaluation of the historical groundwater analytical results indicates that, of the Skinner List metal parameters, only arsenic and lead have exhibited concentrations above comparison values (TACO Tier 1 GROs for Class I Groundwater) on a consistent, non-sporadic basis. Therefore, it is proposed that future quarterly monitoring groundwater samples be submitted for laboratory analysis of BTEX, MTBE, arsenic (total and dissolved), and lead (total and dissolved). Future annual sampling (4th Quarter) will also include general chemistry and natural attenuation parameters.

The new parameter list is proposed for implementation during the next quarterly monitoring

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Messrs. Turner and Faryan
USEPA Region V
Quarterly Groundwater Monitoring Report (July 2007)

sampling event (First Quarter 2008). This event will be conducted in accordance with the January 2006 Dissolved Phase Groundwater Investigation Report.

Please contact me with any questions.

Very truly yours,

URS Corporation

Steven J. Shroff
Project Manager

Encl: Quarterly Groundwater Monitoring Report – July 2007

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REPORT

QUARTERLY GROUNDWATER MONITORING REPORT (INCLUDING SENTINEL WELLS)

JULY 2007

1190505040 – Madison County – ILR000128249
The Hartford Area Hydrocarbon Plume Site
Hartford, Illinois

Prepared for
Hartford Working Group
Hartford, Illinois

November 2, 2007

URS

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EXECUTIVE SUMMARY

This July 2007 Quarterly Groundwater Monitoring Report, prepared for The Hartford Area Hydrocarbon Plume Site (Site) in Hartford, Illinois, focused on monitoring conditions along the perimeter of the dissolved phase plume in northern Hartford.

The Site geology consists of alternating alluvial deposits of clay and silt. This alluvium overlies alluvial sands and sandy glacial outwash that ranges from 60 to 130 feet thick and is known, locally, as the Main Sand. The overlying permeable zones within the alluvium are locally known (in descending order) as the North Olive, the Rand and the EPA Strata. These deposits are overlain and bounded by several clay deposits identified (in descending order) as the A Clay Stratum, which overlies the entire Site, and localized deposits of the B Clay, the C Clay and the D Clay Strata. The regionally extensive Main Sand underlies the fine-grained alluvial deposits.

Gauging results indicated that light non-aqueous phase liquid (LNAPL) was primarily found in the combined EPA and Main Sand Strata, and was limited in Hartford to south of Rand Avenue, east of Illinois State Route 3 and north of East Maple Street. A localized identification of LNAPL was present in the Rand Stratum at the northeast corner of the Site. The extent of the dissolved phase hydrocarbon plume is defined within the available area of investigation.

Groundwater analytical results along the southern and western boundaries of the interpreted extent of the ROST response showed no indications of dissolved phase hydrocarbons. Groundwater analytical results along the northern (HMW-49 series) and eastern (HMW-50 series) boundaries of the Site indicated the presence of dissolved phase hydrocarbon concentrations above groundwater comparison values. The groundwater analytical results revealed that methyl tert-butyl ether (MTBE) was detected in HMW-49C and HMW-49D and benzene was detected in HWM-49C, HMW-49D, and HMW-50C at concentrations above the respective comparison values.

SECTIONONE Introduction

This Quarterly Groundwater Monitoring Report, prepared for The Hartford Area Hydrocarbon Plume Site (Site) in Hartford, Illinois (Figure 1) focused on monitoring conditions along the perimeter of the dissolved phase plume which has formed as a result of the presence of light non-aqueous phase liquid (LNAPL) in northern Hartford (Clayton, 2006). This report also includes the evaluation of the sentinel wells. The five sentinel wells (HMW-25 through HMW-29) were installed to monitor for the possible migration of Light Non-Aqueous Phase Liquid (LNAPL) or associated dissolved phase constituents toward the Hartford Well Head Protection Area (WHPA). The LNAPL is located within northern Hartford. The WHPA is the surface area near the two active Hartford municipal water supply wells, which are located in the southwestern portion of Hartford (McGuire et al. 2001). According to McGuire, et al. (2001), the WHPA may provide recharge to the aquifer over a five-year period. Figure 2 shows the location of all the monitoring wells, including the sentinel wells, the Hartford municipal water supply wells, and the WHPA.

This report was prepared by URS Corporation (URS), on behalf of the Hartford Working Group (HWG). The HWG is comprised of the Atlantic Richfield Company (Atlantic Richfield), The Premcor Refining Group Inc. (Premcor), Shell Oil Products US (Shell), and Sinclair Oil Corporation (Sinclair)[1]. The monitoring and reporting work was done in accordance with the monitoring program presented in Clayton's (2006) *Dissolved Phase Groundwater Investigation Report* and the monitoring program developed under Paragraph 47 of the Administrative Order on Consent (AOC) with the U.S. Environmental Protection Agency (USEPA) in the Matter of The Hartford Area Hydrocarbon Plume Site (Docket No. R7003-5-04-001) (USEPA undated). Paragraph 47 of the AOC required that the five sentinel wells be sampled quarterly for one year,

1 Sinclair Oil Corporation has commenced litigation seeking to rescind its agreement to participate in work, including this quarterly report, being performed by HWG under the *Administrative Order on Consent: In the Matter of The Hartford Area Hydrocarbon Plume Site,* Docket No. R7003-5-04-001 and has suspended participation in HWG activities. The lawsuit is currently pending. (See: *Sinclair v. The Premcor Refining Group Inc., et al.*, No. 06-CH-1346, (Madison County))

in accordance with the *Sentinel Wells Work Plan* approved by the USEPA on November 21, 2003 (Clayton 2003).

Bureau Veritas North America, Inc. (formerly Clayton Group Services, Inc.) (BVNA) conducted the quarterly groundwater sampling and evaluation from December 2003 to April 2007. URS began conducting the sampling during the current sampling event.

The hydrogeology in the northernmost area of Hartford consists of four hydrostratigraphic units identified in descending order as the North Olive, the Rand and the EPA Strata, all of which overlie the Main Sand. The Main Sand has been subdivided into Main Silt and Main Sand based on its composition (i.e., percentage of silt versus sand content). These four hydrostratigraphic units are overlain and bounded by several clay deposits identified (in descending order) as the A Clay, B Clay, C Clay, and D Clay. The A Clay forms the surface layer over the entirety of northern Hartford while the B Clay separates the North Olive and Rand Strata. Scattered areas of fill are present within the A Clay. The C Clay separates the Rand and EPA Strata, and the D Clay separates the EPA Stratum and the Main Sand. More detailed information on the hydrostratigraphic units at the Site is provided in the December 2005 *LNAPL Active Recovery System Conceptual Site Model* (Clayton, 2005) and the January 2006 *Dissolved Phase Groundwater Investigation Report* (Clayton, 2006).

Quarterly groundwater sampling of existing wells (that do not contain LNAPL) within the four hydrostratigraphic units in Hartford has been on-going since December 2003. As wells have been installed as part of investigative activities from 2004 through 2006, they have been incorporated into the quarterly monitoring program. As proposed in the *Dissolved Phase Groundwater Investigation Report* (Clayton, 2006), a select number of monitoring wells continue to be sampled and analyzed on a quarterly basis to monitor conditions along the perimeter of the dissolved phase plume. An additional select number of monitoring wells are sampled and analyzed on an annual basis. The quarterly sampling includes selected wells screened in the Rand, EPA and Main Sand Strata, located beyond the interpreted extent of free product. The annual sampling includes selected wells, if free of LNAPL, throughout northern Hartford. Wells in the North Olive Stratum are included in the groundwater-sampling program; however, as water in this unit is seasonal or ephemeral and occurs as isolated areas of perched water, groundwater is typically not present during sampling events. A list summarizing the wells

included in quarterly sampling is provided in Table 1 and the well locations are shown in Figure 2.

This report presents the results of the third quarter groundwater monitoring activities performed July 10 through 23, 2007. A discussion of the comprehensive well gauging, groundwater sample collection, groundwater analytical results, and conclusions is presented in Sections 2.0 through 5.0, respectively. Recommendations and future activities are presented in Section 6.0 and references are presented in Section 7.0.

SECTIONTWO Well Gauging

Monitoring well gauging was conducted to determine groundwater depths and LNAPL specific thickness (D_o) (if present) in order to determine groundwater flow directions and delineate the current horizontal extent of gauged LNAPL. Do is defined as the specific thickness of LNAPL, which is representative of the amount of LNAPL in a formation. Do is a normalized volume of LNAPL (ft3/ft2) per unit surface area but is expressed as a thickness (in units of feet). Mapping of apparent LNAPL thicknesses measured in monitoring wells at a site with varying soil and LNAPL type is not an accurate depiction of LNAPL extent or magnitude. In order to provide an estimate of the actual LNAPL in the subsurface, "LNAPL specific thickness" is calculated to estimate the true amount of LNAPL in the formation.

The gauging was performed at wells installed in the North Olive, Rand, EPA, and Main Sand Strata. Gauged monitoring wells were located in Hartford, the Shell Rand Avenue site, the Shell Tannery Property, and the Premcor Facility. The Shell sites are located immediately northeast and east of the northern half of Hartford, while the Premcor Facility is located immediately east of the central portion of Hartford. URS gauged the Hartford site monitoring wells, the Shell Rand Avenue, and the Shell Tannery property monitoring wells, while Bureau Veritas gauged the monitoring wells located on the Premcor Facility. As part of the well gauging event, the Mississippi River elevation (at the Premcor Mississippi River Dock) was surveyed by CMT, Inc. on July 10, 2007.

Gauged monitoring wells were inspected and evaluated with respect to their continued suitability for groundwater monitoring. The wells were determined to be in satisfactory condition for continued use in the monitoring program. The results of the monitoring well inspections are included in Appendix A.

The July 2007 groundwater and LNAPL gauging data from Hartford are summarized in Table 2. Monitoring well gauging data for the Shell wells and the wells on the Premcor Facility are summarized in Tables 3 and 4, respectively. A July 2007 groundwater elevation map was created for the North Olive Stratum and is presented in Figure 3. Groundwater flow maps, constructed for the July 2007 gauging event for the Rand, combined EPA and Main Sand, and Main Sand Strata, are presented in Figures 4, 5 and 6, respectively. The area of LNAPL presence, in all strata, is shown in Figure 2. A discussion of the LNAPL extent and specific

thickness, including figures, is presented below and in Appendix B. A discussion of the groundwater gauging data is presented below.

Groundwater within the North Olive Stratum, which is potentially seasonal or ephemeral, occurs as isolated areas of perched water on the surface of the underlying B Clay Stratum in Hartford. Historical data has not indicated any significant areas of continually perched water in this stratum. The July 2007 well gauging for the North Olive Stratum revealed that the locations where groundwater was encountered were generally scattered with only small, localized areas that contained water levels above the stratum base. Therefore, the groundwater map created for the North Olive Stratum presents only the elevation data where groundwater was present and the saturated thickness above the stratum base (Figure 3).

Groundwater within the Rand Stratum in Hartford is also considered to represent localized areas of potentially seasonal or ephemeral perched water on the surface of the underlying C Clay Strata. Groundwater in the Rand Stratum appears to be confined northeast of Hartford at the Shell sites, as this is the only area where the Rand Stratum was extensively saturated. Therefore, the groundwater flow map created for the Rand Stratum, in general, does not contour elevation data for monitoring well locations south of Birch Street. The July 2007 groundwater flow map indicates the presence of a groundwater mound located northeast of the Site (Figure 4). Groundwater flows radially away from this mound. Groundwater from this mound extends and flows southwest into the Village and is controlled by the topography of the base of the Rand Stratum.

Groundwater within the EPA Stratum is generally confined and hydraulically connected to the Main Sand in northeastern Hartford, on the Shell Tannery Property, the Shell Rand Avenue Site, and the Premcor Facility. The July 2007 groundwater flow map of the combined EPA and Main Sand Strata indicates the presence of a groundwater divide, located northeast of the Site, trending along a general northwest/southeast axis (Figure 5). Groundwater on the eastern side of the divide flows in a northeasterly direction while flow on the western side of the divide is in a southwesterly direction. As the southwesterly flow reaches beyond the extent of the D Clay Stratum, a portion of groundwater is captured in the west portion of the Premcor Facility (which includes Premcor Production Well P-2 and P-6, screened between approximately 84 to 114 feet below ground surface [bgs] in the Main Sand, and Shallow Pumping Well RPW-01 screened between approximately 32 to 72 feet bgs in the EPA Stratum and the Main Sand). A

groundwater convergence zone occurs along the western extent of the D Clay Stratum extending northwest from Hawthorne Street near Premcor Production Well P-2 to Rand Avenue.

The July 2007 groundwater flow map for the Main Sand indicates the flow direction underlying Hartford was primarily northeasterly with localized variable flow directions in the vicinity of and towards Production Wells P-1/P-2, P-6, and Shallow Pumping Well RPW-01 located in the northwestern portion of the Premcor Facility, north of East Hawthorne Street (Figure 6). Hartford Municipal Well #4 was in operation at the time of the July gauging.

The approximate extent of LNAPL, the apparent product thickness, and the LNAPL specific thickness (D_o) (Clayton 2005) were determined, where present, for wells installed in each of the four hydrostratigraphic units (a discussion of D_o and how it is calculated is provided in Appendix B):

- The North Olive Stratum well gauging data did not indicate the presence of measurable LNAPL (Figure B-1). Historically, measurable LNAPL has not been detected in wells gauged in the North Olive Stratum.
- The Rand Stratum well gauging data indicated the presence of LNAPL at three wells (Figure B-2):
  - HMW-4 (located between East Birch Street and East Rand Avenue, along North Olive Street) with an apparent product thickness of 0.02 feet and a LNAPL specific thickness of 0.01 feet;
  - HMW-48B (located between East Birch Street and East Rand Avenue, along North Olive Street) with an apparent product thickness of 0.01 feet and a LNAPL specific thickness of 0.01 feet; and
  - MP-29C (located just north of East Birch Street on North Market Street) with an apparent product thickness of 3.20 feet and a LNAPL specific thickness of 0.72 feet.
- The combined EPA and Main Sand Strata well gauging data (Figure B-3) indicated LNAPL was detected at 59 wells, with an apparent product thickness ranging from 0.01 to 8.17 feet and a LNAPL specific thickness ranging from 0.01 feet to 1.60 feet.

In July 2007, the approximate extent of LNAPL in the combined EPA and Main Sand Strata was limited in Hartford to south of Rand Avenue, east of Illinois State Route 3, and north of East Maple Street.

- The Main Sand below the D Clay well data did not indicate the presence of measurable LNAPL (Figure B-4). Historically, measurable LNAPL has not been detected in wells gauged in the Main Sand below the D Clay.

These findings regarding approximate extent of LNAPL, the apparent product thickness, and the LNAPL specific thickness are consistent with historical results.

SECTIONTHREE Groundwater Sample Collection

Quarterly groundwater samples were collected from eighteen wells (including the five Sentinel Wells) during the third quarter of 2007. None of the wells installed in the North Olive Stratum were sampled due to the absence of groundwater in this unit. A limited number of wells completed in the Rand and EPA Strata were sampled due to the units' limited presence in the area, the presence of free product in some wells, and/or wells being dry or having limited available water. The majority of the wells included in quarterly sampling are in the Main Sand. A summary list of wells included in the quarterly groundwater sampling and their sampling status as of third quarter 2007 is provided in Table 1.

Third quarter 2007 groundwater sample collection activities were conducted July 11 through 23, 2007 for the following montoring wells:

- A Clay well MP-89A
- Rand Stratum well HMW-50A
- EPA Stratum wells HMW-49C and HMW-50B
- Main Sand wells HMW-25, HMW-26, HMW-27, HMW-28, HMW-29, HMW-39B, HMW-39C, HMW-40C, HMW-49D, HMW-50C, HMW-52C, MP-81C, MP-89C, and MP-92D.

Eleven wells included in the quarterly groundwater sampling program were not sampled in July 2007 because they were dry (MP-81A, MP-81B and MP-89B) or contained an insufficient amount of water for sampling (HMW-39A, HMW-40A, HMW-40B, HMW-49A, HWM-49B, HMW-52A, HMW-52B, and MP-92C).

Monitoring well purging and sampling were performed using dedicated low-flow sampling pumps and polypropylene tubing, in accordance with URS' low flow groundwater sampling Standard Operating Procedure (SOP), where applicable (Appendix C). A peristaltic pump and/or bailer were used for purging and sampling at locations where low-flow purging/sampling was not applicable. Upon collection, groundwater samples were placed in laboratory-supplied, pre-preserved (if appropriate) containers. After collection, samples were immediately labeled, placed in a cooler containing ice and delivered under chain of custody procedures to Teklab, Inc. in Collinsville, Illinois for laboratory analysis. The purged groundwater removed from each well

was temporarily stored in a tank, equipped with secondary containment and located in a secure area within the Village of Hartford before removal by a waste disposal contractor.

Water quality indicator parameters including temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity, and specific conductivity were electronically measured and recorded using a calibrated Mini-Troll with an associated Pocket PC (in addition to the field logbook) during purging and prior to low-flow sampling. The downloaded data logger indicator parameter records for the July 2007 event are included in Appendix D.

Quarterly groundwater samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), MTBE, Skinner List Metals (total and dissolved) along with general chemistry and natural attenuation parameters, as described in Clayton's (2006) *Dissolved Phase Groundwater Investigation Report*. The practical quantitation limits and analytical methods are presented in Table 5. The containers with applicable preservation requirements (if appropriate) for each parameter are presented in Table 6.

SECTIONFOUR Groundwater Analytical Results

In July 2007, the third quarter groundwater sampling included a total of 18 wells. All of the wells sampled during the July 2007 quarterly event were located beyond the interpreted extent of free product, as verified through groundwater gauging efforts.

Groundwater quality values listed in 35 Illinois Administrative Code (IAC) Part 742 (Tiered Approach to Corrective Action Objectives [TACO] Tier 1 Groundwater Remediation Objectives [GROs] for Class I groundwater [Illinois Pollution Control Board, 1997]) was used as comparison values only for evaluating the July 2007 groundwater analytical results. These results were consistent with historical trends. The July 2007 results for BTEX and MTBE, Skinner List Metals, General Chemistry, and Natural Attenuation Parameters and Indicator Parameters are provided in Tables 7 through 10, respectively. Summaries of the third quarter 2007 groundwater analytical results (benzene, toluene, ethyl benzene, total xylenes, MTBE, total lead, and dissolved lead concentrations) for the Rand Stratum, EPA Stratum and Main Sand are presented in Figures 7, 8, and 9, respectively. A discussion of the July 2007 results for BTEX, MTBE and Skinner List Metals (total and dissolved) is presented below.

No detectable concentrations of BTEX constituents or MTBE were present in the samples collected from fifteen of the eighteen wells samples (including all the sentinel wells): Rand Stratum well HMW-50A, EPA Stratum well HMW-50-B and Main Sand wells HMW-25, HMW-26, HMW-27, HMW-28, HMW-29, HMW-39B, HMW-39C, HMW-40C, HMW-52C, MP-81C, MP-89A (screened in A Clay permeable lens), MP-89C, and MP-92D.

Benzene was detected in the remaining three wells, EPA Stratum well HMW-49C, and Main Sand wells HMW-49D and HMW-50C. The detected concentrations of these samples were above the comparison value: HMW-49C (250 µg/L vs. 5 µg/L), HMW-49D (451 µg/L vs. 5 µg/L), and HMW-50C (158 µg/L vs. 5 µg/L).

The remaining BTEX constituents (toluene, ethyl benzene, and xylenes) were detected below the respective comparison values in EPA Stratum well HMW-49C, and Main Sand wells HMW-49D, and HMW-50C.

MTBE was detected in three of the eighteen wells. One Main Sand well, HMW-50C (22.9 µg/L), contained concentrations of MTBE below the comparison value (70 µg/L). The samples from EPA Stratum well HMW-49C (317 µg/L) and the Main Sand well HMW-49D (84.6 µg/L)

contained concentrations of MTBE above the comparison value (70 µg/L). Historically, MTBE has not been associated with the LNAPL in northern Hartford.

A total of 15 metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, iron, lead, mercury, nickel, selenium, silver, vanadium, and zinc) were detected in the samples from the 18 wells collected in July 2007. Six of the metals (arsenic, cadmium, iron, lead, selenium, and vanadium) were present at concentrations above comparison values:

- Total arsenic was present above the comparison value [0.05 milligrams per liter (mg/L)] in samples from Main Sand Stratum wells HMW-40C (0.171 mg/L).
- Total cadmium was present above the comparison value (0.005 mg/L) in the sample from EPA Stratum well HMW-49C (0.0122 mg/L).
- Total iron was present in samples from eleven wells at concentrations above the comparison value (5 mg/L): EPA Stratum wells HMW-49C (54.6 mg/L) and HMW-50B (5.66 mg/L); and Main Sand Stratum wells HMW-26, HMW-29, HMW-39C, HMW-40C, HMW-49D, HMW-50C, HMW-52C, MP-89C, and MP-92D (ranging from 5.07 to 26 mg/L).
- Dissolved iron was present in samples from eight wells at concentrations above the comparison value (5 mg/L): EPA Stratum wells HMW-49C (5.59 mg/L), and HMW-50B (6.02 mg/L); and Main Sand Stratum wells HMW-26, HMW-39C, HMW-49D, HMW-52C, MP-89C, and MP-92D (ranging from 5.54 to 25 mg/L).
- Total lead was present in samples from two wells at concentrations above the comparison value (0.0075 mg/L): EPA Stratum well HMW-49C (0.038 mg/L) and Main Sand Stratum well HMW-52C (0.0098 mg/L).
- Dissolved lead was present above the comparison value (0.0075 mg/L) in the sample from EPA Stratum well HMW-49C (0.0113 mg/L).
- Total selenium was present above the comparison value (0.05 mg/L) in the sample from Main Sand Stratum well MP-89C (0.273 mg/L).
- Dissolved selenium was present above the comparison value (0.05 mg/L) in the sample from Main Sand Stratum well MP-89C (0.26 mg/L).

- Total vanadium was present above the comparison value (0.049 mg/L) in the sample from EPA Stratum well HMW-49C (0.0915 mg/L).

A qualified chemist conducted a data review on the laboratory samples and the Quality Assurance/Quality Control samples from this monitoring event. This review revealed no concerns with the data.

As part of the Site investigation, quarterly groundwater sampling of existing wells (without LNAPL) has been ongoing since December 2003. As wells were installed as part of investigative activities they were incorporated into the former quarterly monitoring program. The inclusive data set for December 2003 through July 2007 consists of a total of 107 different wells (63 Main Sand wells, 10 EPA Stratum wells, 30 Rand Stratum wells, and 4 North Olive Stratum wells). Summary tables presenting the previous four quarters of historic groundwater analytical results for BTEX constituents and MTBE, metals (total and dissolved), and general chemistry and natural attenuation parameters, are presented in Appendix E for reference. Figures illustrating the historic summary of groundwater analytical results (benzene, MTBE, total BTEX, total SVOCs, total lead, and dissolved lead) for each hydrostratigraphic unit, inclusive of the July 2007 quarterly results, are provided in Appendix F.

SECTIONFIVE Conclusions

The third quarter 2007 groundwater gauging and sampling activities conducted in July focused on monitoring conditions along the perimeter of the dissolved phase plume. LNAPL was identified primarily in the combined EPA and Main Sand Strata (Appendix B). The extent of LNAPL in the combined EPA and Main Sand Strata was primarily north of East Maple Street, east of Illinois State Route 3 and south of Rand Avenue. The extent of LNAPL was limited to three wells in the Rand Stratum (HMW-4, HMW-48B, and MP-29C), located in the northeast corner of the Site. No measurable LNAPL was present in the North Olive Stratum or the Main Sand Stratum below the D Clay.

The conclusions drawn from the third quarter 2007 activities are consistent with Clayton's (2006) *Dissolved Phase Groundwater Investigation Report.* The extent of the dissolved phase hydrocarbon plume is defined within the available area of investigation.

The following findings are consistent with groundwater flow in the Main Sand, which, based on a review of both historical and July 2007 flow mapping data, has consistently been northerly:

- The groundwater analytical results along the southern and western boundaries of the interpreted extent of the ROST response did not indicate the presence of dissolved phase hydrocarbons.
- The groundwater analytical results along the northern and eastern boundaries of the Site indicated the presence of dissolved phase hydrocarbon concentrations above applicable groundwater comparison values.
- The sentinel wells have not been impacted by the LNAPL underlying northern Hartford. BTEX or MTBE constituents were not detected at quantifiable concentrations and none of the identified inorganic constituents were detected above applicable TACO Tier 1 GROs for Class I groundwater. The conclusion is also based on the groundwater flow mapping of the Main Sand, which shows flow in the area of the LNAPL plume in northern Hartford is to the northeast, away from the Hartford WHPA and the Hartford municipal water supply wells.

SECTIONSIX Recommendations and Future Activities

In general, routine quarterly monitoring began in January 2005 and included BETX, MTBE, Skinner List total metals, Skinner List dissolved metals, and general chemistry (other parameters such as SVOCs were also analyzed during this period). Natural attenuation parameters were included beginning in July 2005.

Based on the historical general chemistry and natural attenuation data, the HWG proposes to reduce the sampling frequency for these parameters from quarterly to annually (4th quarter only). These modifications are based on the general consistency of groundwater concentration data over the course of monitoring. Future sampling of these parameters may be re-evaluated based on documented changes in groundwater concentration trends or the general conceptual site model.

An evaluation of the historical groundwater analytical results indicates that, of the Skinner List metal parameters, only arsenic and lead have exhibited concentrations above comparison values (TACO Tier 1 GROs for Class I Groundwater) on a consistent, non-sporadic basis. Therefore, the HWG proposes future quarterly monitoring groundwater samples be submitted for laboratory analysis of BTEX, MTBE, arsenic (total and dissolved) and lead (total and dissolved).

The new parameter list is proposed for implementation during the next quarterly groundwater monitoring sampling event (currently scheduled for October 2007). This event will be conducted in accordance with the January 2006 Dissolved Phase Groundwater Investigation Report (Clayton, 2006). A well gauging event will also be conducted for the Hartford, Shell and Premcor groundwater monitoring wells at that time.

SECTIONSEVEN References

Bureau Veritas North America, Inc., June 22, 2007. *Quarterly Groundwater Monitoring Report, April 2007, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

Bureau Veritas North America, Inc., June 15, 2007. Sentinel Wells *Quarterly Groundwater Monitoring Report, April 2007, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

Clayton Group Services, Inc., December 15, 2005. *LNAPL Active Recovery System Conceptual Site Model, The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

Clayton Group Services, Inc., January 4, 2006. *Dissolved Phase Groundwater Investigation Report for The Hartford Area Hydrocarbon Plume Site, Hartford, Illinois.*

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Tables

TABLE 1
JULY 2007 GROUNDWATER SAMPLING WELL LIST
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
The Hartford Working Group / Hartford, IL

WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING	QUARTERLY SAMPLING	ANNUAL SAMPLING
HMW-25	Main Sand	S		
HMW-26	Main Sand	S		
HMW-27	Main Sand	S		
HMW-28	Main Sand	S		
HMW-29	Main Sand	S		
HMW-38A	N. Olive			X
HMW-38B	B/C Clay (PL in B/C Clay)			X
HMW-38C	Main Sand			X
HMW-39A	Main Silt (Rand Horizon)		NS	
HMW-39B	Main Silt (Rand Horizon)		S	
HMW-39C	Main Sand		S	
HMW-40A	A Clay		NS	
HMW-40B	Main Sand		NS	
HMW-40C	Main Sand		S	
HMW-43A	N. Olive			X
HMW-43B	B/C Clay (PL in B/C Clay)			X
HMW-43C	Main Sand			X
HMW-44A	N. Olive			X
HMW-44B	Rand			X
HMW-44C	Main Sand			X
HMW-44D	Main Sand (below LNAPL)			X
HMW-45A	N. Olive			X
HMW-45B	Rand			X
HMW-45C	Main Sand			X
HMW-47A	N. Olive			X
HMW-47B	B/C Clay (PL in B/C Clay)			X
HMW-47C	Main Sand			X
HMW-48A	N. Olive			X
HMW-48B	Rand			X
HMW-48C	EPA			X
HMW-48D	Main Sand (below D Clay)			X
HMW-48E	NI			NI
HMW-49A	N. Olive		NS	
HMW-49B	B/C Clay (PL in B/C Clay)		NS	
HMW-49C	EPA		S	
HMW-49D	Main Sand (below D Clay)		S	
HMW-50A	Rand		S	
HMW-50B	EPA		S	
HMW-50C	Main Sand (below D Clay)		S	
HMW-52A	Main Silt (N. Olive Horizon)		NS	
HMW-52B	Main Silt (Rand Horizon)		NS	
HMW-52C	Main Sand		S	

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The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
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WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING	QUARTERLY SAMPLING	ANNUAL SAMPLING
HMW-53A	N. Olive			X
HMW-53B	Main Silt (Rand Horizon) / Main Sand			X
HMW-53C	Main Sand (below LNAPL)			X
HMW-54A	N. Olive			X
HMW-54B	Main Sand			X
HMW-54C	Main Sand (below LNAPL)			X
HMW-55A	NI		NI	
HMW-55B	NI		NI	
HMW-55C	NI		NI	
HMW-55D	NI		NI	
HMW-56A	NI		NI	
HMW-56B	NI		NI	
HMW-56C	NI		NI	
HMW-56D	NI		NI	
HMW-56E	NI		NI	
MP-33A	A Clay			X
MP-33B	N. Olive			X
MP-33C	Rand			X
MP-33D	Main Sand			X
MP-40A	A Clay (PL in A Clay)			X
MP-40B	Main Silt (Rand Horizon)			X
MP-40C	Main Sand			X
MP-44A	A Clay			X
MP-44B	N. Olive			X
MP-44C	Rand			X
MP-44D	Main Sand			X
MP-48A	N. Olive			X
MP-48B	Main Silt (Rand Horizon)			X
MP-48C	Main Sand			X
MP-52A	A Clay (PL in A Clay)			X
MP-52B	Rand			X
MP-52C	Main Sand			X
MP-58A	A Clay			X
MP-58B	Main Silt (Rand Horizon)			X
MP-58C	Main Sand			X
MP-59A	A Clay			X
MP-59B	Main Silt (Rand Horizon)			X
MP-59C	Main Sand			X
MP-78A	A Clay			X
MP-78B	N. Olive			X
MP-78C	Rand			X
MP-78D	Main Sand			X

TABLE 1
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The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
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WELL LOCATIONS	STRATUM SCREENED	SENTINEL WELL QUARTERLY SAMPLING	QUARTERLY SAMPLING	ANNUAL SAMPLING
MP-81A	A Clay (PL in A Clay)		NS	
MP-81B	Main Silt (Rand Horizon)		NS	
MP-81C	Main Sand		S	
MP-83A	N. Olive			X
MP-83B	Rand			X
MP-83C	Main Sand			X
MP-85A	N. Olive			X
MP-85B	Rand			X
MP-85C	EPA			X
MP-85D	Main Sand (below D Clay)			X
MP-86A	A Clay (PL in A Clay)			X
MP-86B	Main Silt (Rand Horizon)			X
MP-86C	Main Sand			X
MP-89A	A Clay (PL in A Clay)		S	
MP-89B	Main Silt (Rand Horizon)		NS	
MP-89C	Main Sand		S	
MP-92C	N. Olive		NS	
MP-92D	Main Silt (Rand Horizon) / Main Sand		S	

NOTES:
MP-92 A & B are probes which are not constructed to allow groundwater sampling
S = Well sampled
NS = Well not sampled due to being dry or containing an insufficient amount of water for sampling
P = Well not sampled due to product present
NI = Well proposed to be installed and included in future sampling
PL = Permeable Lens

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
IEPA-4	Main Sand	01/09/07	430.35	34.10	34.94	396.25	395.41	0.84	0.06	396.06	42.92	387.43	
		04/10/07	430.35	31.25	33.11	399.10	397.24	1.86	0.32	398.67			
		07/10/07	430.35	30.22	32.06	400.13	398.29	1.84	0.28	399.71			Lid Off
HB-07	Main Sand		432.32										Plugged
HB-16	Main Sand	01/10/07	431.42	35.10	36.40	396.32	395.02	1.30	0.13	396.02	40.50	390.92	
		04/10/07	431.42	31.79	32.76	399.63	398.66	0.97	0.08	399.41			
		07/10/07	431.42	31.65	31.70	399.77	399.72	0.05	0.01	399.76			
HB-27	Main Sand		425.83										Plugged
HB-30	Main Sand	01/09/07	431.08	34.80		396.28		0.25	0.02		35.05	396.03	
		04/10/07	431.08	31.87	32.86	399.21	398.22	0.99	0.08	398.98			TD= January 2007
		07/10/07	431.08	31.21	32.48	399.87	398.60	1.27	0.13	399.58			
HB-31	Main Sand	01/10/07	431.49	36.50	36.54	394.99	394.95	0.04	0.01	394.98	40.90	390.59	
		04/11/07	431.49	31.89	31.95	399.60	399.54	0.06	0.01	399.59			
													Resident will not allow access
HB-32	Main Sand	01/09/07	433.45		37.60		395.85	0.00	0.00	395.85	45.90	387.55	
		04/10/07	433.45		34.00		399.45	0.00	0.00	399.45			
		07/10/07	433.45		34.12		399.33	0.00	0.00	399.33			
HB-33	Rand/C Clay/EPA/	01/10/07	430.23		32.44		397.79	0.00	0.00	397.79	41.08	389.15	
		04/10/07	429.46								6.18	423.28	DRY
	D Clay/ Main Sand	07/10/07	429.46										DRY
HB-37	Main Sand	01/10/07	431.77	35.64	35.86	396.13	395.91	0.22	0.02	396.08	38.32	393.45	
		04/10/07	431.77		32.62		399.15	0.00	0.00	399.15			
		07/10/07	431.77		32.07		399.70	0.00	0.00	399.70			
HB-38	Main Sand	01/09/07	429.92		33.24		396.68	0.00	0.00	396.68	34.44	395.48	
		04/10/07	429.92		30.23		399.69	0.00	0.00	399.69			
		07/10/07	429.92		29.43		400.49	0.00	0.00	400.49			
HMW-01	Rand	01/09/07	429.94		22.64		407.30	0.00	0.00	407.30	22.85	407.09	
		04/10/07	429.94		21.38		408.56	0.00	0.00	408.56			
		07/10/07	429.94		22.06		407.88	0.00	0.00	407.88			
HMW-02	Main Sand	01/09/07	429.65	33.91	35.23	395.74	394.42	1.32	0.13	395.44	36.55	393.10	
		04/10/07	429.65	30.94	31.92	398.71	397.73	0.98	0.08	398.48			
		07/10/07	429.65	29.69	31.80	399.96	397.85	2.11	0.38	399.47			Lid broken
HMW-03	EPA	01/09/07	428.72		30.87		397.85	0.00	0.00	397.85	34.19	394.53	
		04/10/07	428.72		27.41		401.31	0.00	0.00	401.31			
		07/10/07	428.72		27.44		401.28	0.00	0.00	401.28			
HMW-04	Rand	01/09/07	428.96	15.97	15.99	412.99	412.97	0.02	0.01	412.99	25.58	403.38	
		04/10/07	428.96	12.69	12.75	416.27	416.21	0.06	0.01	416.26			
		07/10/07	428.96	15.51	15.53	413.45	413.43	0.02	0.01	413.45			
HMW-07	Rand	01/09/07	429.12		25.24		403.88	0.00	0.00	403.88	26.46	402.66	
		04/10/07	429.12		25.14		403.98	0.00	0.00	403.98			
		07/10/07	429.12		24.87		404.25	0.00	0.00	404.25			
HMW-08	Main Sand	01/09/07	429.74	33.66	34.77	396.08	394.97	1.11	0.07	395.82	42.17	387.57	
		04/10/07	429.74	30.11	30.89	399.63	398.85	0.78	0.06	399.45			
		07/10/07	429.74	30.25	31.12	399.49	398.62	0.87	0.07	399.29			
HMW-09	N. Olive/ B Clay/	01/09/07	430.23		23.16		407.07	0.00	0.00	407.07	33.19	397.04	
		04/10/07	430.23		23.18		407.05	0.00	0.00	407.05			
	Rand	07/10/07	430.23		23.13		407.10	0.00	0.00	407.10			
HMW-10	Main Sand	01/09/07	430.20	34.03	35.46	396.17	394.74	1.43	0.16	395.84	43.06	387.14	
		04/10/07	430.20	31.00	31.65	399.20	398.55	0.65	0.05	399.05			
		07/10/07	430.20	30.35	32.19	399.85	398.01	1.84	0.28	399.43			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_O (ft)	*Piezometric Surface Elevation* (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HMW-13	N. Olive	01/09/07	430.81		18.77		412.04	0.00	0.00	412.04	18.95	411.86	
		04/10/07	430.81		18.76		412.05	0.00	0.00	412.05			
		07/10/07	430.81		18.75		412.06	0.00	0.00	412.06			
HMW-14	Rand/ C Clay/	01/10/07	430.86	34.36	35.70	396.50	395.16	1.34	0.13	396.19	38.34	392.52	
		04/10/07	430.86	31.09	31.80	399.77	399 06	0.71	0.06	399.61			
	Main Sand	07/10/07	430.86	30.86	31.95	400.00	398.91	1.09	0.07	399.75			
HMW-18	Main Sand	01/10/07	431.58	35.15	36.29	396.43	395.29	1.14	0.07	396.17	40.98	390.60	
		04/10/07	431.58	31.75	32.22	399.83	399.36	0.47	0.04	399.72			
		07/10/07	431.58	31.58	32.20	400.00	399.38	0.62	0.05	399.86			
HMW-19	Main Sand	01/10/07	431.80	35.11	36.22	396.69	395.58	1.11	0.07	396.43	40.95	390.85	
		04/10/07	431.80	31.68	31.98	400.12	399.82	0.30	0.02	400.05			
		07/10/07	431.80	31.55	32.00	400.25	399.80	0.45	0.04	400.15			
HMW-20	Rand/ C Clay/	01/09/07	430.65	34.55	35.31	396.10	395.34	0.76	0.06	395.93	38.78	391.87	
		04/10/07	430.65	31.28	32.58	399.37	398.07	1.30	0.13	399.07			
	Main Sand	07/10/07	430.65	30.60	32.55	400.05	398.10	1.95	0.35	399.60			
HMW-21	N. Olive/ B Clay/	01/09/07	430.05		24.26		405.79	0.00	0.00	405.79	24.68	405.37	
		04/10/07	430.05		23.08		406.97	0.00	0.00	406.97			
	Rand	07/10/07	430.05		22.50		407.55	0.00	0.00	407.55			
HMW-22	Main Sand	01/10/07	430.15	33.88	35.23	396.27	394.92	1.35	0.13	395.96	40.30	389.85	
		04/10/07	430.15	30.64	30.99	399.51	399.16	0.35	0.02	399.43			
		07/10/07	430.15	30.36	32.50	399.79	397.65	2.14	0.38	399.30			
HMW-25	Main Sand	01/10/07	427.45		29.84		397.61	0.00	0.00	397.61	35.14	392.31	TD = January 2006
		04/10/07	427.45		25.22		402.23	0.00	0.00	402.23			
		07/10/07	427.45		25.88		401.57	0.00	0.00	401.57			
HMW-26	Main Sand	01/10/07	425.20		28.00		397.20	0.00	0.00	397.20	35 59	389.61	TD = January 2006
		04/10/07	425.20		24.57		400.63	0.00	0.00	400.63			
		07/10/07	425.20		23.66		401.54	0.00	0.00	401.54			
HMW-27	Main Sand	01/09/07	430.51		34.40		396.11	0.00	0.00	396.11	35 03	395.48	
		04/10/07	430.51		30 40		400.11	0.00	0.00	400.11			
		07/10/07	430.51		29.93		400.58	0.00	0.00	400.58			(T 7/13/04-4/19/05)
HMW-28	Main Sand	01/09/07	430.97		33.38		397.59	0.00	0.00	397.59	36.02	394.95	TD = January 2006
		04/10/07	430.97		29.79		401.18	0.00	0.00	401.18			
		07/10/07	430.97		29.18		401.79	0.00	0.00	401.79			
HMW-29	Main Sand	01/09/07	429.99		32.55		397.44	0.00	0.00	397.44	34.55	395.44	
		04/10/07	429.99		29.79		400.20	0.00	0.00	400.20			
		07/10/07	429.99		27.39		402.60	0 00	0.00	402.60			
HMW-30	Rand/ C Clay/	01/09/07	430.07	34.07	34.87	396.00	395.20	0.80	0 05	395.82	43.82	386.25	
		04/10/07	430.07	30.53	31.01	399.54	399.06	0.48	0.03	399.43			
	Main Sand	07/10/07	430.07	30.23	32.74	399.84	397 33	2.51	0.50	399.26			
HMW-31	Rand/ C Clay/	01/09/07	430.09	34 08	34.95	396.01	395.14	0.87	0.06	395 81	43.70	386.39	
		04/10/07	430.09	30.66	30.78	399.43	399.31	0.12	0.01	399.40			
	Main Sand	07/10/07	430 09	30.79	31.00	399.30	399.09	0.21	0.01	399.25			
HMW-32	Rand/ C Clay/	01/09/07	430.01	34.03	34 63	395.98	395.38	0.60	0.04	395.84	43.45	386.56	
		04/10/07	430 01	30.44	31.06	399.57	398.95	0.62	0.04	399.43			
	Main Sand	07/10/07	430.01	30.56	31 28	399.45	398.73	0.72	0.04	399.28			
HMW-33	Rand/ C Clay/	01/09/07	430.13	34.05	35.16	396.08	394.97	1.11	0.05	395.82	41.81	388.32	
		04/10/07	430.13	30.51	31.67	399.62	398.46	1.16	0.08	399.35			
	Main Sand	07/10/07	430.13	30.26	33.02	399.87	397 11	2.76	0.54	399.24			

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HMW-34	Rand/ C Clay/	01/09/07	429.83	33.60	35.02	396.23	394.81	1.42	0.16	395.90	44.00	385.83	
		04/10/07	429.83	30.54	31.18	399.29	398.65	0.64	0.05	399.14			
	Main Sand	07/10/07	429.83	29.96	31.68	399.87	398.15	1.72	0.25	399.47			
HMW-35	Rand/ C Clay/	01/09/07	429.81	33.59	34.99	396.22	394.82	1.40	0.16	395.90	44.33	385.48	
		04/10/07	429.81	30.58	31.13	399.23	398.68	0.55	0.05	399.10			
	Main Sand	07/10/07	429.81	30.20	30.91	399.61	398.90	0.71	0.06	399.45			
HMW-36	Rand/ C Clay/	01/09/07	429.91	33.70	34.91	396.21	395.00	1.21	0.10	395.93	44.25	385.66	
		04/10/07	429.91	30.68	31.20	399.23	398.71	0.52	0.04	399.11			
	Main Sand	07/10/07	429.91	30.03	31.91	399.88	398.00	1.88	0.32	399.45			
HMW-37	Rand/ C Clay/	01/09/07	429.61	33.42	34.67	396.19	394.94	1.25	0.13	395.90	44.10	385.51	
		04/10/07	429.61	30.41	31.15	399.20	398.46	0.74	0.06	399.03			
	Main Sand	07/10/07	429.61	29.88	30.73	399.73	398.88	0.85	0.07	399.53			
HMW-38 A	N. Olive	01/10/07	430.06								16.86	413.20	DRY, TD= January 2007
		04/10/07	430.06										DRY
		07/10/07	430.06										DRY
HMW-38 B	B/C Clay	01/10/07	429.93		25.13		404.80	0.00	0.00	404.80	25.24	404.69	
		04/10/07	429.93		25.13		404.80	0.00	0.00	404.80			
	(PL in B/C Clay)	07/10/07	429.93		25.13		404.80	0.00	0.00	404.80			(T 1/10/05-1/11/05)
HMW-38 C	Main Sand	01/10/07	430.23		34.41		395.82	0.00	0.00	395.82	42.56	387.67	
		04/10/07	430.23		30.41		399.82	0.00	0.00	399.82			
		07/10/07	430.23		31.17		399.06	0.00	0.00	399.06			(T 11/19/04)
HMW-39 A	Main Silt	01/10/07	426.46		20.35		406.11	0.00	0.00	406.11	20.60	405.86	
		04/10/07	426.46		20.37		406.09	0.00	0.00	406.09			
	(Rand Horizon)	07/10/07	426.46		20.34		406.12	0.00	0.00	406.12			
HMW-39 B	Main Silt	01/10/07	426.55		23.35		403.20	0.00	0.00	403.20	29.69	396.86	
		04/10/07	426.55		22.89		403.66	0.00	0.00	403.66			
	(Rand Horizon)	07/10/07	426.55		23.87		402.68	0.00	0.00	402.68			(T 1/12/05)
HMW-39 C	Main Sand	01/10/07	426.28		30.04		396.24	0.00	0.00	396.24	38.60	387.68	TD = January 2006
		04/10/07	426.28		25.91		400.37	0.00	0.00	400.37			
		07/10/07	426.28		26.51		399.77	0.00	0.00	399.77			(T 1/11/05-4/20/05)
HMW-40 A	A Clay	01/10/07	425.01		12.96		412.05	0.00	0.00	412.05	13.18	411.83	
		04/10/07	425.01		12.96		412.05	0.00	0.00	412.05			
		07/10/07	425.01		12.98		412.03	0.00	0.00	412.03			
HMW-40 B	Main Sand	01/10/07	424.86		24.37		400.49	0.00	0.00	400.49	24.56	400.30	
		04/10/07	424.86		24.34		400.52	0.00	0.00	400.52			
		07/10/07	424.86		24.29		400.57	0.00	0.00	400.57			
HMW-40 C	Main Sand	01/10/07	425.01		28.62		396.39	0.00	0.00	396.39	39.08	385.93	
		04/10/07	425.01		24.49		400.52	0.00	0.00	400.52			
		07/10/07	425.01		24.97		400.04	0.00	0.00	400.04			(T 4/21/05)
HMW-41 A	Main Silt	01/10/07	425.42		17.80		407.62	0.00	0.00	407.62	18.13	407.29	
		04/10/07	425.42		17.90		407.52	0.00	0.00	407.52			
	(Rand Horizon)	07/10/07	425.42		19.89		405.53	0.00	0.00	405.53			Will not be used in GW flow map. TD to be verified 10/07
HMW-41 B	Main Silt	01/10/07	425.62		28.81		396.81	0.00	0.00	396.81	31.66	393.96	
		04/10/07	425.62		25.40		400.22	0.00	0.00	400.22			
	(Rand Horizon)	07/10/07	425.62		24.32		401.30	0.00	0.00	401.30			
HMW-41 C	Main Sand	01/10/07	425.85		29.04		396.81	0.00	0.00	396.81	48.09	377.76	
		04/10/07	425.85		25.41		400.44	0.00	0.00	400.44			
		07/10/07	425.85		25.02		400.83	0.00	0.00	400.83			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HMW-42 A	Main Silt	01/09/07	431.39		26.02		405.37	0.00	0.00	405.37	26.14	405.25	
		04/10/07	431.39		26.05		405.34	0.00	0.00	405.34			
	(Rand Horizon)	07/10/07	431.39		30.19		401.20	0.00	0.00	401.20			Will not be used in GW flow map. TD to be verified 10/07
HMW-42 B	Main Sand	01/09/07	431.46		34.49		396.97	0.00	0.00	396.97	39.73	391.73	
		04/10/07	431.46		31.42		400.04	0.00	0.00	400.04			
		07/10/07	431.46		30.23		401.23	0.00	0.00	401.23			
HMW-43 A	N. Olive	01/09/07	428.73		17.41		411.32	0.00	0.00	411.32	17.64	411.09	
		04/10/07	428.73		17.43		411.30	0.00	0.00	411.30			
		07/10/07	428.73		17.41		411.32	0.00	0.00	411.32			
HMW-43 B	B/C Clay	01/09/07	428.63		22.10		406.53	0.00	0.00	406.53	22.34	406.29	
		04/10/07	428.63		22.12		406.51	0.00	0.00	406.51			
	(PL in B/C Clay)	07/10/07	428.63		22.10		406.53	0.00	0.00	406.53			(T 1/11/05-1/11/05)
HMW-43 C	Main Sand	01/09/07	428.96		32.79		396.17	0.00	0.00	396.17	41.13	387.83	
		04/10/07	428.96		29.90		399.06	0.00	0.00	399.06			
		07/10/07	428.96		29.17		399.79	0.00	0.00	399.79			(T 1/11/05)
HMW-44 A	N. Olive	01/09/07	429.47		16.12		413.35	0.00	0.00	413.35	16.35	413.12	
		04/10/07	429.47		16.07		413.40	0.00	0.00	413.40			
		07/10/07	429.47		16.07		413.40	0.00	0.00	413.40			
HMW-44 B	Rand	01/09/07	429.41		23.41		406.00	0.00	0.00	406.00	23.75	405.66	
		04/10/07	429.41		23.35		406.06	0.00	0.00	406.06			
		07/10/07	429.41		23.28		406.13	0.00	0.00	406.13			
HMW-44 C	Main Sand	01/09/07	428.38	32.16	33.97	396.22	394.41	1.81	0.25	395.80	41.65	386.73	TD = January 2006
		04/10/07	428.38	29.39	30.33	398.99	398.05	0.94	0.05	398.77			
		07/10/07	428.38	28.63	30.85	399.75	397.53	2.22	0.41	399.24			
HMW-44 D	Main Sand	01/09/07	429.76		33.98		395.78	0.00	0.00	395.78	50.45	379.31	
		04/10/07	429.76		30.95		398.81	0.00	0.00	398.81			
		07/10/07	429.76		30.44		399.32	0.00	0.00	399.32			(T 11/11/05)
HMW-45 A	N. Olive	01/10/07	431.17		17.51		413.66	0.00	0.00	413.66	17.64	413.53	
		04/11/07	431.17		17.52		413.65	0.00	0.00	413.65			
		07/10/07	431.17		17.53		413.64	0.00	0.00	413.64			
HMW-45 B	Rand	01/10/07	431.22		28.00		403.22	0.00	0.00	403.22	28.11	403.11	
		04/11/07	431.22		27.57		403.65	0.00	0.00	403.65			
		07/10/07	431.22		27.24		403.98	0.00	0.00	403.98			
HMW-45 C	Main Sand	01/10/07	430.87	34.81	35.30	396.06	395.57	0.49	0.03	395.95	45.50	385.37	
		04/11/07	430.87	30.90	31.58	399.97	399.29	0.68	0.05	399.81			
		07/10/07	430.87	31.54	32.05	399.33	398.82	0.51	0.03	399.21			
HMW-46 A	N. Olive	01/10/07	430.51		18.54		411.97	0.00	0.00	411.97	17.60	412.91	
		04/10/07	430.51		17.56		412.95	0.00	0.00	412.95			
		07/10/07	430.51		17.61		412.90	0.00	0.00	412.90			
HMW-46 B	B/C Clay	01/10/07	430.61		24.80		405.81	0.00	0.00	405.81	25.60	405.01	
		04/10/07	430.61		23.88		406.73	0.00	0.00	406.73			
	(PL in B/C Clay)	07/10/07	430.61		24.13		406.48	0.00	0.00	406.48			
HMW-46 C	Main Sand	01/10/07	430.49	34.60	34.67	395.89	395.82	0.07	0.01	395.87	40.85	389.64	
		04/11/07	430.49	30.64	30.71	399.85	399.78	0.07	0.01	399.83			
		07/10/07	430.49	31.33	31.58	399.16	398.91	0.25	0.02	399.10			
HMW-47 A	N. Olive	01/10/07	430.50		19.29		411.21	0.00	0.00	411.21	19.38	411.12	
		04/10/07	430.50		19.02		411.48	0.00	0.00	411.48			
		07/10/07	430.50		19.30		411.20	0.00	0.00	411.20			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HMW-47 B	B/C Clay	01/10/07	430.13		20.55		409.58	0.00	0.00	409.58	22.47	407.66	
		04/10/07	430.13		18.86		411.27	0.00	0.00	411.27			
	(PL in B/C Clay)	07/10/07	430.13		19.62		410.51	0.00	0.00	410.51			
HMW-47 C	Main Sand	01/10/07	430.61	34.84	35.01	395.77	395.60	0.17	0.01	395.73	44.94	385.67	
		04/10/07	430.61		31.05		399.56	0.00	0.00	399.56			
		07/10/07	430.61	31.53	31.54	399.08	399.07	0.01	0.01	399.08			
HMW-48 A	N. Olive	01/09/07	429.16								14.40	414.76	DRY, TD= January 2007
		04/10/07	429.16		13.64		415.52	0.00	0.00	415.52			
		07/10/07	429.16		13.86		415.30	0.00	0.00	415.30			
HMW-48 B	Rand	01/09/07	429.18		16.21		412.97	0.00	0.00	412.97	29.19	399.99	
		04/10/07	429.18		14.20		414.98	0.00	0.00	414.98			
		07/10/07	429.18	15.85	15.86	413.33	413.32	0.01	0.01	413.33			
HMW-48 C	EPA	01/09/07	429.02	31.50	31.83	397.52	397.19	0.33	0.02	397.44	40.96	388.06	
		04/10/07	429.02	28.62	29.80	400.40	399.22	1.18	0.08	400.13			
		07/10/07	429.02	26.73	34.90	402.29	394.12	8.17	1.54	400.41			Plug was left off, water can get in
HMW-48 D	Main Sand	01/09/07	428.98		33.29		395.69	0.00	0.00	395.69	53.13	375.85	
		04/10/07	428.98		29.81		399.17	0.00	0.00	399.17			
	(below D Clay)	07/10/07	428.98		29.95		399.03	0.00	0.00	399.03			
HMW-49 A	N. Olive	01/10/07	430.21		12.83		417.38	0.00	0.00	417.38	13.13	417.08	
		04/10/07	430.21		12.87		417.34	0.00	0.00	417.34			
		07/10/07	430.21		12.87		417.34	0.00	0.00	417.34			
HMW-49 B	B/C Clay	01/10/07	430.23		23.13		407.10	0.00	0.00	407.10	24.18	406.05	
		04/10/07	430.23		22.70		407.53	0.00	0.00	407.53			
	(PL in B/C Clay)	07/10/07	430.23		23.36		406.87	0.00	0.00	406.87			
HMW-49 C	EPA	01/10/07	430.18		32.59		397.59	0.00	0.00	397.59	39.45	390.73	
		04/10/07	430.18		29.23		400.95	0.00	0.00	400.95			
		07/10/07	430.18		30.03		400.15	0.00	0.00	400.15			(T 1/19/05)
HMW-49 D	Main Sand	01/10/07	430.25		34.48		395.77	0.00	0.00	395.77	50.07	380.18	
		04/10/07	430.25		30.74		399.51	0.00	0.00	399.51			
	(below D Clay)	07/10/07	430.25		31.42		398.83	0.00	0.00	398.83			(T 1/19/05)
HMW-50 A	Rand	01/09/07	434.43		19.12		415.31	0.00	0.00	415.31	29.88	404.55	TD = January 2006
		04/10/07	434.43		13.84		420.59	0.00	0.00	420.59			Tannery
		07/10/07	434.43		17.90		416.53	0.00	0.00	416.53			(T 1/11/05)
HMW-50 B	EPA	01/09/07	434.43		35.15		399.28	0.00	0.00	399.28	42.82	391.61	TD = January 2006
		04/10/07	434.43		31.90		402.53	0.00	0.00	402.53			
		07/10/07	434.43		32.07		402.36	0.00	0.00	402.36			(T 1/7/05)
HMW-50 C	Main Sand	01/09/07	434.28		38.68		395.60	0.00	0.00	395.60	59.45	374.83	TD = January 2006
		04/10/07	434.28		35.75		398.53	0.00	0.00	398.53			
	(below D Clay)	07/10/07	434.28		35.36		398.92	0.00	0.00	398.92			(T 1/7/05)
HMW-51 A	N. Olive	01/10/07	425.46								13.65	411.81	DRY, TD= January 2007
		04/10/07	425.46		13.60		411.86	0.00	0.00	411.86			
		07/10/07	425.46										DRY
HMW-51 B	Main Sand	01/10/07	425.51		24.79		400.72	0.00	0.00	400.72	25.18	400.33	
		04/10/07	425.51		24.71		400.80	0.00	0.00	400.80			
		07/10/07	425.51		24.73		400.78	0.00	0.00	400.78			
HMW-51 C	Main Sand	01/10/07	425.42		28.79		396.63	0.00	0.00	396.63	41.80	383.62	
		04/10/07	425.42		24.80		400.62	0.00	0.00	400.62			
		07/10/07	425.42		25.05		400.37	0.00	0.00	400.37			

TABLE 2
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The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_0 (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HMW-52 A	Main Silt	01/09/07	427.80		20.24		407.56	0.00	0.00	407.56	20.36	407.44	
		04/10/07	427.80		20.26		407.54	0.00	0.00	407.54			
	(N. Olive Horizon)	07/10/07	427.80		20.25		407.55	0.00	0.00	407.55			
HMW-52 B	Main Silt	01/09/07	427.81		26.70		401.11	0.00	0.00	401.11	26.86	400.95	
		04/10/07	427.81		26.76		401.05	0.00	0.00	401.05			
	(Rand Horizon)	07/10/07	427.81										DRY
HMW-52 C	Main Sand	01/09/07	427.83		31.38		396.45	0.00	0.00	396.45	39.25	388.58	
		04/10/07	427.83		28.64		399.19	0.00	0.00	399.19			
		07/10/07	427.83		27.80		400.03	0.00	0.00	400.03			
HMW-53 A	N. Olive	01/09/07	429.73		15.72		414.01	0.00	0.00	414.01	15.90	413.83	
		04/10/07	429.73		15.74		413.99	0.00	0.00	413.99			
		07/10/07	429.73		15.72		414.01	0.00	0.00	414.01			
HMW-53 B	Main Silt	01/09/07	429.76	33.39	34.60	396.37	395.16	1.21	0.10	396.09	41.06	388.70	
	(Rand Horizon)/	04/10/07	429.76	30.50	31.62	399.26	398.14	1.12	0.07	399.00			
	Main Sand	07/10/07	429.76	29.75	31.10	400.01	398.66	1.35	0.16	399 70			
HMW-53C	Main Sand	01/09/07	429.66		33.62		396.04	0.00	0.00	396.04	46.92	382.74	
		04/10/07	429.66		30.70		398.96	0.00	0.00	398.96			
		07/10/07	429.66		29.99		399.67	0.00	0.00	399.67			
HMW-54 A	N. Olive	01/09/07	429.54								15.89	413.65	DRY, TD = January 2007
		04/10/07	429.54								15.89		DRY
		07/10/07	429.54										DRY
HMW-54 B	Main Sand	01/09/07	429.55	33.27	34.66	396.28	394.89	1.39	0.13	395.96	44.48	385.07	
		04/10/07	429.55	30.43	31.82	399.12	397.73	1.39	0.13	398.80			
		07/10/07	429.55	29.85	30.71	399.70	398.84	0.86	0.05	399.50			
HMW-54 C	Main Sand	01/09/07	429.56		33.62		395.94	0.00	0.00	395.94	49.80	379.76	
		04/10/07	429.56		30.76		398.80	0.00	0.00	398.80			
		07/10/07	429.56		30.10		399.46	0 00	0.00	399.46			
HP-01A	Main Sand	01/09/07	425.84		26.90		398.94	0.00	0.00	398.94	36.95	388.89	
		04/10/07	425.84		21.55		404.29	0.00	0 00	404.29			
		07/10/07	425.84		23.26		402.58	0.00	0.00	402.58			(T 10/7/05)
HP-01B	Main Sand	01/09/07	425.77		26.81		398.96	0.00	0.00	398.96	67.96	357.81	
		04/10/07	425.77		21.48		404.29	0.00	0.00	404.29			
	(Deep Nest Well)	07/10/07	425.77		23.21		402.56	0.00	0.00	402.56			
HP-01C	Main Sand	01/09/07	425.84		26.89		398.95	0.00	0.00	398.95	99.73	326.11	
		04/10/07	425.84		21.56		404.28	0.00	0.00	404.28			
	(Deep Nest Well)	07/10/07	425.84		23.31		402.53	0 00	0.00	402.53			
HP-02	Main Sand	01/09/07	429.92		31.02		398.90	0.00	0.00	398.90	39.60	390.32	
		04/10/07	429.92		25.78		404.14	0.00	0.00	404.14			
		07/10/07	429.92		27.20		402.72	0.00	0.00	402.72			
HP-03A	Main Sand	01/09/07	429.28		30 55		398.73	0.00	0.00	398.73	44.91	384.37	
		04/10/07	429.28		25.58		403.70	0.00	0.00	403.70			
		07/10/07	429.28		26.68		402.60	0.00	0.00	402.60			(T 10/7/05)
HP-03B	Main Sand	01/09/07	429.24		30.56		398.68	0.00	0.00	398.68	72.40	356.84	
		04/10/07	429.24		25.50		403.74	0.00	0.00	403.74			
	(Deep Nest Well)	07/10/07	429.24		26.71		402.53	0.00	0.00	402.53			
HP-03C	Main Sand	01/09/07	429.10		30.39		398.71	0.00	0.00	398.71	102.22	326.88	
		04/10/07	429.10		25.32		403.78	0.00	0.00	403.78			
	(Deep Nest Well)	07/10/07	429.10		26.57		402.53	0.00	0.00	402.53			

TABLE 2
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
HP-04A	Main Sand	01/09/07	430.94		33.04		397.90	0.00	0.00	397.90	44.97	385.97	
		04/10/07	430.94		28.89		402.05	0.00	0.00	402.05			
		07/10/07	430.94		29.03		401.91	0.00	0.00	401.91			
HP-04B	Main Sand	01/09/07	430.94		33.00		397.94	0.00	0.00	397.94	72.85	358.09	
		04/10/07	430.94		28.82		402.12	0.00	0.00	402.12			
	(Deep Nest Well)	07/10/07	430.94		29.02		401.92	0.00	0.00	401.92			
HP-04C	Main Sand	01/09/07	430.96		33.04		397.92	0.00	0.00	397.92	103.22	327.74	
		04/10/07	430.96		28.79		402.17	0.00	0.00	402.17			
	(Deep Nest Well)	07/10/07	430.96		29.02		401.94	0.00	0.00	401.94			
HP-05A	Main Sand	01/09/07	424.42		25.52		398.90	0.00	0.00	398.90	39.44	384.98	
		04/10/07	424.42		19.20		405.22	0.00	0.00	405.22			
		07/10/07	424.42		22.01		402.41	0.00	0.00	402.41			
HP-05B	Main Sand	01/09/07	424.58		25.97		398.61	0.00	0.00	398.61	66.25	358.33	
		04/10/07	424.58		19.43		405.15	0.00	0.00	405.15			
	(Deep Nest Well)	07/10/07	424.58		22.48		402.10	0.00	0.00	402.10			
HP-05C	Main Sand	01/09/07	424.43		25.85		398.58	0.00	0.00	398.58	96.07	328.36	
		04/10/07	424.43		19.25		405.18	0.00	0.00	405.18			
	(Deep Nest Well)	07/10/07	424.43		22.38		402.05	0.00	0.00	402.05			
HP-06	Main Sand	01/09/07	425.88		26.84		399.04	0.00	0.00	399.04	40.13	385.75	
		04/10/07	425.88		20.79		405.09	0.00	0.00	405.09			
		07/10/07	425.88		23.30		402.58	0.00	0.00	402.58			
HP-07	Main Sand	01/09/07	429.04		29.78		399.26	0.00	0.00	399.26	44.02	385.02	
		04/10/07	429.04		24.32		404.72	0.00	0.00	404.72			
		07/10/07	429.04		26.00		403.04	0.00	0.00	403.04			
HP-08	Main Sand	01/09/07	429.81		31.03		398.78	0.00	0.00	398.78	40.22	389.59	
		04/10/07	429.81		26.88		402.93	0.00	0.00	402.93			
		07/10/07	429.81		26.40		403.41	0.00	0.00	403.41			
HP-09	Main Sand	01/09/07	431.45		32.76		398.69	0.00	0.00	398.69	44.55	386.90	
		04/10/07	431.45		28.18		403.27	0.00	0.00	403.27			
		07/10/07	431.45		28.82		402.63	0.00	0.00	402.63			
MP-5S	A Clay	01/09/07	429.83								9.65	420.18	DRY, TD= January 2007
		04/10/07	429.83										
		07/10/07	429.83										DRY
MP-5D	Rand	01/09/07	430.02		24.29		405.73	0.00	0.00	405.73	28.17	401.85	
		04/10/07	430.02										DRY
		07/10/07	430.02		21.88		408.14	0.00	0.00	408.14			
MP-6S	A Clay	01/09/07	430.15								9.81	420.34	
		04/10/07	430.15										
		07/10/07	430.15										
MP-6D	Rand	01/09/07	430.13									430.13	
		04/10/07	430.13										
		07/10/07	430.13										
MP-7S	A Clay	01/09/07	430.17									430.17	
		04/10/07	430.17										
		07/10/07	430.17		2.10		428.07	0.00	0.00	428.07			
MP-7D	Rand	01/09/07	430.16									430.16	
		04/10/07	430.16										
		07/10/07	430.16		22.18		407.98	0.00	0.00	407.98			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-8S	A. Clay	01/09/07	430.20		7.10		423.10	0.00	0.00	423.10	9.81	420.39	
		04/10/07	430.20		3.22		426.98	0.00	0.00	426.98			
		07/10/07	430.20		4.19		426.01	0.00	0.00	426.01			
MP-8D	Rand	01/09/07	430.14		25.04		405.10	0.00	0.00	405.10	25.64	404.50	
		04/10/07	430.14		23.69		406.45	0.00	0.00	406.45			
		07/10/07	430.14		22.96		407.18	0.00	0.00	407.18			
MP-9S	A Clay	01/09/07	430.05		8.99		421.06	0.00	0.00	421.06	9.56	420.49	
		04/10/07	430.05		9.07		420.98	0.00	0.00	420.98			
		07/10/07	430.05		8.74		421.31	0.00	0.00	421.31			
MP-9D	Rand	01/09/07	430.00		23.78		406.22	0.00	0.00	406.22	24.63	405.37	
		04/10/07	430 00	22.45	22.98	407.55	407.02	0.53	0.03	407.43			
		07/10/07	430.00	22.08	22.09	407.92	407.91	0.01	0.01	407.92			
MP-10S	A Clay	01/10/07	430.53								9.90	420.63	DRY, TD= January 2007
		04/10/07	430.53								9.89		DRY
	(PL in A Clay)	07/10/07	430.53								9.88		DRY
MP-10D	B/C Clay/ Main Silt	01/10/07	430.37		20.20		410 17	0.00	0.00	410.17	24.74	405.63	
		04/10/07	430.37		18.49		411.88	0.00	0.00	411.88			
	(Rand Horizon)	07/10/07	430.37		19.40		410.97	0.00	0.00	410.97			
MP-11S	A Clay	01/10/07	431.19								9.70	421.49	DRY, TD= January 2007
		04/10/07	431.19								9.70		DRY
	(PL in A Clay)	07/10/07	431.19										DRY
MP-11D	B/C Clay/ Main Silt	01/10/07	431.19		20.79		410.40	0.00	0.00	410.40	24.65	406.54	
		04/10/07	431.19		18.99		412.20	0.00	0 00	412.20			
	(Rand Horizon)	07/10/07	431.19		19.89		411.30	0.00	0.00	411.30			
MP-12S	A Clay	01/10/07	431.70								9.88	421.82	DRY, TD= January 2007
		04/10/07	431.70								9.86		DRY
	(PL in A Clay)	07/10/07	431.70										DRY
MP-12D	B Clay/ Rand/	01/10/07	431 63		20.82		410.81	0.00	0.00	410.81	23.81	407.82	
		04/10/07	431.63		18.79		412.84	0.00	0.00	412.84			
	C Clay	07/10/07	431.63		20.19		411.44	0.00	0.00	411.44			
MP-13S	A Clay	01/09/07	429.20								9.12	420.08	DRY, TD= January 2007
		04/10/07	429.20		8.18		421.02	0.00	0.00	421.02			
		07/10/07	429.20		8.00		421.20	0.00	0.00	421.20			
MP-13D	Main Silt	01/09/07	429.30								27.68	401.62	DRY, TD= January 2007
		04/10/07	429.30		27.37		401.93	0.00	0.00	401.93			
	(Rand Horizon)	07/10/07	429.30										DRY
MP-14S	A Clay	01/09/07	429.51								9.32	420.19	DRY, TD= January 2007
		04/10/07	429.51								9.34		DRY
		07/10/07	429.51		8.97		420 54	0.00	0.00	420.54	9.32		
MP-14D	Main Silt	01/09/07	429.51		26.82		402.69	0.00	0.00	402.69	26.92	402.59	
		04/10/07	429.51		26.82		402.69	0.00	0.00	402.69			
	(Rand Horizon)	07/10/07	429.51		26.82		402.69	0.00	0.00	402.69			
MP-15S	A Clay	01/09/07	429.63								9.45	420.18	DRY, TD= January 2007
		04/10/07	429.63								9.45		DRY
		07/10/07	429.63										DRY
MP-15D	Main Silt	01/09/07	429.58		26.77		402.81	0.00	0.00	402.81	26.88	402.70	
		04/10/07	429.58		26.78		402.80	0.00	0.00	402.80			
	(Rand Horizon)	07/10/07	429.58		26.80		402.78	0.00	0.00	402.78			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-16S	A Clay	01/09/07	429.75								9.78	419.97	DRY, TD= January 2007
		04/10/07	429.75								9.78		DRY
		07/10/07	429.75										DRY
MP-16D	Main Silt	01/09/07	429.77		27.60		402.17	0.00	0.00	402.17	27.66	402.11	
		04/10/07	429.77		27.62		402.15	0.00	0.00	402.15			
	(Rand Horizon)	07/10/07	429.77		27.61		402.16	0.00	0.00	402.16			
MP-25	N. Olive/ B Clay/	01/09/07	429.71		28.18		401.53	0.00	0.00	401.53	28.51	401.20	
		04/10/07	429.71		26.90		402.81	0.00	0.00	402.81			
	Rand	07/10/07	429.71		26.87		402.84	0.00	0.00	402.84			
MP-26	N. Olive/ B Clay/	01/09/07	429.54								28.65	400.89	DRY, TD= January 2007
		04/10/07	429.54		25.78		403.76	0.00	0.00	403.76			
	Rand	07/10/07	429.54		26.15		403.39	0.00	0.00	403.39			
MP-27	N. Olive/ B Clay/	01/09/07	429.55		28.69		400.86	0.00	0.00	400.86	28.75	400.80	
		04/10/07	429.55		27.69		401.86	0.00	0.00	401.86			
	Rand	07/10/07	429.55	27.92	27.93	401.63	401.62	0.01	0.01	401.63			Sheen
MP-28	Rand	01/09/07	429.80		25.02		404.78	0.00	0.00	404.78	28.69	401.11	
		04/10/07	429.80		22.42		407.38	0.00	0.00	407.38			
		07/10/07	429.80		22.60		407.20	0.00	0.00	407.20			
MP-29 A	N. Olive	01/09/07	429.39								11.90	417.49	DRY, TD= January 2007
		04/10/07	429.39		11.86		417.53	0.00	0.00	417.53			
		07/10/07	429.39		11.89		417.50	0.00	0.00	417.50			
MP-29 B	Rand	01/09/07	429.43								20.31	409.12	DRY, TD= January 2007
		04/10/07	429.43								20.29		DRY
		07/10/07	429.43										DRY
MP-29 C	Rand	01/09/07	429.39	24.63	24.64	404.86	404.85	0.01	0.01	404.86	28.30	401.19	
		04/10/07	429.39		23.05		406.44	0.00	0.00	406.44			
		07/10/07	429.39	22.31	25.51	407.08	403 88	3.20	0.72	406 34			
MP-29 D	Main Sand	01/09/07	429.47	33.40	34.73	396.07	394.74	1.33	0.11	395.76	41.00	388.47	
		04/10/07	429.47	29.80	31.15	399.67	398.32	1.35	0.11	399.36			
		07/10/07	429.47	29.61	32.30	399.86	397.17	2.69	0.54	399.24			
MP-30 A	N. Olive	01/10/07	431.20		18.46		412.74	0.00	0.00	412.74	18.55	412.65	
		04/10/07	431.20		18.49		412.71	0.00	0.00	412.71			
		07/10/07	431.20		18.52		412.68	0.00	0.00	412.68			
MP-30 B	Rand	01/10/07	431.21		29.37		401.84	0.00	0.00	401.84	29.97	401.24	
		04/10/07	431.21		29.05		402.16	0.00	0.00	402.16			
		07/10/07	431.21		27.19		404.02	0.00	0.00	404.02			
MP-30 C	Main Sand	01/10/07	431.13	34.76	35.83	396.37	395.30	1.07	0.07	396.12	50.00	381.13	
		04/10/07	431.13	31.24	31.85	399.89	399.28	0.61	0.05	399.75			
		07/10/07	431.13	31.60	31.87	399.53	399.26	0.27	0.02	399.47			
MP-31 A	A Clay	01/10/07	426.71								9.68	417.03	DRY, TD= January 2007
		04/10/07	426.71								9 68		DRY
		07/10/07	426.71										DRY
MP-31 B	N. Olive	01/10/07	426.79		15.78		411.01	0.00	0.00	411.01	17.75	409.04	
		04/10/07	426.79		15.61		411.18	0.00	0.00	411.18			
		07/10/07	426.79		15.46		411.33	0.00	0.00	411.33			
MP-31 C	Main Sand	01/10/07	426.98		30.80		396.18	0.00	0.00	396.18	38.15	388.83	TD = January 2006
		04/10/07	426.98		26.72		400.26	0.00	0.00	400.26			
		07/10/07	426.98		27.18		399.80	0.00	0.00	399.80			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-32 A	N. Olive	01/10/07	429.68								14.06	415.62	DRY, TD= January 2007
		04/10/07	429.68		13.94		415.74	0.00	0.00	415.74			
		07/10/07	429.68										DRY
MP-32 B	Main Sand	01/10/07	429.68								31.05	398.63	DRY, TD= January 2007
		04/10/07	429.68		30.00		399.68	0.00	0.00	399.68			
		07/10/07	429.68	29.67	30.32	400.01	399.36	0.65	0.06	399.86			
MP-32 C	Main Sand	01/10/07	429.72		33.60		396.12	0.00	0.00	396.12	48.18	381.54	
		04/10/07	429.72		29.74		399.98	0.00	0.00	399.98			
		07/10/07	429.72		30.00		399.72	0.00	0.00	399.72			
MP-33 A	A Clay	01/10/07	430.05								9.62	420.43	
		04/10/07	430.05		9.59		420.46	0.00	0.00	420.46			
		07/10/07	430.05										DRY
MP-33 B	N. Olive	01/10/07	430.09								14.13	415.96	
		04/10/07	430.09		14.09		416.00	0.00	0.00	416.00			
		07/10/07	430.09		14.21		415.88	0.00	0.00	415.88			Will not be used in GW flow map. TD to be verified 10/07
MP-33 C	Rand	01/10/07	430.09								25.89	404.20	
		04/10/07	430.09								25.86	404.23	DRY
		07/10/07	430.09										DRY
MP-33 D	Main Sand	01/10/07	430.09								44.35	385.74	
		04/10/07	430.09		30.20		399.89	0.00	0.00	399.89			
		07/10/07	430.09		30.43		399.66	0.00	0.00	399.66			
MP-34 A	N. Olive	01/10/07	430.97								15.69	415.28	ENSR Transducer Present
		04/10/07	430.97		15.68		415.29	0.00	0.00	415.29			
		07/10/07	430.97		15.70		415.27	0.00	0.00	415.27			Will not be used in GW flow map. TD to be verified 10/07
MP-34 B	Rand	01/10/07	430.70								24.50	406.20	ENSR Transducer Present
		04/10/07	430.70								24.30		DRY
		07/10/07	430.70										DRY
MP-34 C	Main Sand	01/10/07	430.88								43.61	387.27	ENSR Transducer Present
		04/11/07	430.88	30.82	30.88	400.06	400.00	0.06	0.01	400.05			
		07/10/07	430.88	30.70	32.40	400.18	398.48	1.70	0.25	399.79			
MP-35 A	A Clay	01/10/07	430.36								9.88	420.48	DRY, TD= January 2007
		04/10/07	430.36								8.89		DRY
		07/10/07	430.36		9.02		421.34	0.00	0.00	421.34			Will not be used in GW flow map. TD to be verified 10/07
MP-35 B	N. Olive	01/10/07	430.41								17.05	413.36	DRY, TD= January 2007
		04/10/07	430.41								17.04	413.37	DRY
		07/10/07	430.41										DRY
MP-35 C	Rand	01/10/07	430.44								25.32	405.12	DRY, TD= January 2007
		04/10/07	430.44		25.03		405.41	0.00	0.00	405.41			
		07/10/07	430.44								25.31		DRY
MP-35 D	Main Sand	01/10/07	430.43	34.18	35.53	396.25	394.90	1.35	0.16	395.94	42.95	387.48	
		04/10/07	430.43	30.63	31.46	399.80	398.97	0.83	0.06	399.61			
		07/10/07	430.43	30.51	32.40	399.92	398.03	1.89	0.32	399.49			
MP-36 A	N. Olive	01/10/07	431.91								12.59	419.32	
		04/10/07	431.91								12.60		DRY
		07/10/07	431.91										DRY
MP-36 B	Rand	01/10/07	431.94		26.37		405.57	0.00	0.00	405.57	29.11	402.83	
		04/10/07	431.94		25.69		406.25	0.00	0.00	406.25			
		07/10/07	431.94		25.35		406.59	0.00	0.00	406.59			

TABLE 2
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The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_0 (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-36C	Main Sand	01/10/07	431.99	35.70	36.84	396.29	395.15	1.14	0.07	396.03	43.66	388.33	
		04/10/07	431.99										
		07/10/07	431.99	32.32	32.99	399.67	399.00	0.67	0.06	399.52			
MP-37 A	N. Olive	01/09/07	429.01								13.05	415.96	DRY, TD= January 2007
		04/10/07	429.01								13.03		DRY
		07/10/07	429.01								13.05		DRY
MP-37 B	Rand	01/09/07	428.99								22.75	406.24	DRY, TD= January 2007
		04/10/07	428.99								22.69	406.30	DRY
		07/10/07	428.99								22.70		DRY
MP-37 C	C Clay	01/09/07	429.07	25.53	25.54	403.54	403.53	0.01	0.01	403.54	27.95	401.12	
		04/10/07	429.07		24.61		404.46	0.00	0.00	404.46			
	(PL in Clay)	07/10/07	429.07		24.41		404.66	0.00	0.00	404.66			
MP-37 D	Main Sand	01/09/07	429.04	32.09	34.37	396.95	394.67	2.28	0.44	396.43	40.05	388.99	
		04/10/07	429.04	29.49	30.72	399.55	398.32	1.23	0.10	399.27			
		07/10/07	429.04	29.52	30.28	399.52	398.76	0.76	0.06	399.35			
MP-38 A	N. Olive	01/10/07	427.17								11.98	415.19	DRY, TD= January 2007
		04/10/07	427.17								11.99		DRY
		07/10/07	427.17										DRY
MP-38 B	Main Silt	01/10/07	427.03								23.19	403.84	DRY, TD= January 2007
		04/10/07	427.03								23.18	403.85	DRY
	(Rand Horizon)	07/10/07	427.03										DRY
MP-38 C	Main Sand	01/10/07	426.91	29.96	32.43	396.95	394.48	2.47	0.50	396.38	39.05	387.86	
		04/10/07	426.91		26.58		400.33	0.00	0.00	400.33			
		07/10/07	426.91		26.90		400.01	0.00	0.00	400.01			
MP-39 A	N. Olive	01/10/07	432.09		12.80		419.29	0.00	0.00	419.29	12.87	419.22	
		04/10/07	432.09		12.80		419.29	0.00	0.00	419.29			
		07/10/07	432.09								12.90		DRY
MP-39 B	Rand	01/10/07	432.07		21.32		410.75	0.00	0.00	410.75	25.99	406.08	
		04/10/07	432.07		18.21		413.86	0.00	0.00	413.86			
		07/10/07	432.07		20.00		412.07	0.00	0.00	412.07			
MP-39 C	Main Sand	01/10/07	432.07	35.47	37.10	396.60	394.97	1.63	0.22	396.23	44.30	387.77	
		04/10/07	432.07	31.84	32.79	400.23	399.28	0.95	0.07	400.01			
		07/10/07	432.07	31.73	33.40	400.34	398.67	1.67	0.25	399.96			
MP-40 A	A Clay	01/10/07	431.02								10.96	420.06	DRY, TD= January 2007
		04/10/07	431.02								10.92		DRY
	(PL in A Clay)	07/10/07	431.02										DRY
MP-40 B	Main Silt	01/10/07	431.04								29.50	401.54	DRY, TD= January 2007
		04/10/07	431.04								29.48	401.56	DRY
	(Rand Horizon)	07/10/07	431.04		24.31		406.73	0.00	0.00	406.73	24.62		
MP-40 C	Main Sand	01/10/07	431.04	34.41	35.87	396.63	395.17	1.46	0.19	396.29	46.80	382.24	
		04/10/07	431.04		31.20		399.84	0.00	0.00	399.84			
		07/10/07	431.04		31.21		399.83	0.00	0.00	399.83			
MP-41 A	N. Olive	01/09/07	431.24								13.50	417.74	DRY, TD= January 2007
		04/10/07	431.24								13.52		DRY
		07/10/07	431.24								13.51		DRY
MP-41 B	Rand	01/09/07	431.23		25.80		405.43	0.00	0.00	405.43	25.81	405.42	
		04/10/07	431.23		25.79		405.44	0.00	0.00	405.44			
		07/10/07	431.23								25.80		DRY

TABLE 2
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1190505040 -- Madison County -- ILR 000128249
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_0 (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-41 C	Main Sand	01/09/07	431.08	34.76	35.86	396.32	395.22	1.10	0.07	396.07	44.60	386.48	
		04/11/07	431.08	31.36	31.49	399.72	399.59	0.13	0.01	399.69			
		07/10/07	431.08	31.03	32.51	400.05	398.57	1.48	0.19	399.71			
MP-42 A	N. Olive	01/09/07	430.21								17.80	412.41	DRY, TD= January 2007
		04/10/07	430.21		17.78		412.43	0.00	0.00	412.43			
		07/10/07	430.21								17.76		DRY
MP-42 B	Rand	01/09/07	430.20								28.45	401.75	DRY, TD= January 2007
		04/10/07	430.20								28.44		DRY
		07/10/07	430.20		28.39		401.81	0.00	0.00	401.81	28.43		
MP-42 C	Main Sand	01/10/07	430.32	34.11	35.44	396.21	394 88	1.33	0.13	395.90	39.73	390.59	
		04/10/07	430.32	30.94	32.04	399.38	398.28	1.10	0.07	399.13			
		07/10/07	430.32	30.55	32.29	399.77	398.03	1.74	0.25	399.37			
MP-43 A	N. Olive	01/10/07	426.75								8.38	418.37	DRY, TD= January 2007
		04/10/07	426.75								8.38		DRY
		07/10/07	426.75										DRY
MP-43 B	Main Silt (Rand Horizon)	01/10/07	426.72								17.24	409.48	DRY, TD= January 2007
		04/10/07	426.72								17.23	409.49	DRY
		07/10/07	426.72										DRY
MP-43 C	Main Silt (Rand Horizon)/ Main Sand	01/10/07	426.39		29.92		396.47	0.00	0.00	396.47	36.37	390.02	
		04/10/07	426.39		25.98		400.41	0.00	0.00	400.41			
		07/10/07	426.39	26.02	26.93	400.37	399.46	0.91	0.07	400.16			
MP-44 A	A Clay	01/09/07	430.64								9.85	420.79	DRY, TD= January 2007
		04/10/07	430.64								9.82		DRY
		07/10/07	430.64								9.82		DRY
MP-44 B	N. Olive	01/09/07	430.54								14.64	415.90	DRY, TD= January 2007
		04/10/07	430.54								14.62	415.92	DRY
		07/10/07	430.54								14.62		DRY
MP-44 C	Rand	01/09/07	430.54								24.59	405.95	DRY, TD= January 2007
		04/10/07	430.54		24.55		405.99	0.00	0.00	405.99			
		07/10/07	430.54								24.54		DRY
MP-44 D	Main Sand	01/09/07	430.62	34.27	35.65	396.35	394.97	1.38	0.16	396.03	44.60	386.02	
		04/10/07	430.62	31.07	31.48	399.55	399.14	0.41	0.03	399.46			
		07/10/07	430.62	30.54	32.11	400.08	398.51	1.57	0.22	399.72			
MP-45 A	N. Olive	01/09/07	430.04		12.75		417.29	0.00	0.00	417.29	12.76	417.28	
		04/10/07	430.04		12.73		417.31	0 00	0.00	417.31			
		07/10/07	430.04		12.74		417.30	0.00	0.00	417.30			
MP-45 B	Rand	01/09/07	430.04								23.65	406.39	DRY, TD= January 2007
		04/10/07	430.04										DRY
		07/10/07	430.04								23.64		DRY
MP-45 C	Main Sand	01/09/07	429.93	33.59	35.25	396.34	394.68	1.66	0.25	395 96	44.20	385.73	
		04/10/07	429.93		30.62		399.31	0.00	0.00	399.31			
		07/10/07	429.93	29.88	31.25	400.05	398.68	1.37	0.16	399.73			
MP-46 A	N. Olive	01/09/07	429.67								14.70	414.97	DRY, TD= January 2007
		04/10/07	429.67								14.69		DRY
		07/10/07	429.67								14.68		DRY
MP-46 B	Rand	01/09/07	429.65		24.15		405.50	0.00	0.00	405.50	24.16	405.49	
		04/10/07	429.65		24.14		405.51	0.00	0.00	405.51			
		07/10/07	429.65		24.14		405.51	0.00	0.00	405.51			

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1190505040 – Madison County – ILR 000128249
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_D[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-46 C	Main Sand	01/09/07	429.60	33.28	34.91	396.32	394.69	1.63	0.22	395.95	41.36	388.24	
		04/10/07	429.60	30.33	30.41	399.27	399.19	0.08	0.01	399.25			
		07/10/07	429.60	29.61	29.62	399.99	399.98	0.01	0.01	399.99			Sheen
MP-47 A	N. Olive	01/09/07	429.12								14.10	415.02	DRY, TD= January 2007
		04/11/07	429.12								14.11		DRY
		07/10/07	429.12								14.09		DRY
MP-47 B	Rand	01/09/07	429.05		22.34		406.71	0.00	0.00	406.71	22.33	406.72	
		04/11/07	429.05		22.34		406.71	0.00	0.00	406.71			
		07/10/07	429.05								22.33		DRY
MP-47 C	Main Sand	01/09/07	429.01	32.72	34.41	396.29	394.60	1.69	0.22	395.90	38.45	390.56	
		04/11/07	429.01	29.53	30.64	399.48	398.37	1.11	0.04	399.22			
		07/10/07	429.01	29.07	30.71	399.94	398.30	1.64	0.19	399.56			
MP-48 A	N. Olive	01/10/07	428.92								19.02	409.90	ENSR Transducer Present
		04/10/07	428.92								18.70		DRY
		07/10/07	428.92										DRY
MP-48 B	Main Silt	01/10/07	429.04								30.84	398.20	ENSR Transducer Present
		04/10/07	429.04	28.91	29.03	400.13	400.01	0.12	0.01	400.10			
	(Rand Horizon)	07/10/07	429.04	28.55	29.56	400.49	399.48	1.01	0.08	400.26			
MP-48 C	Main Sand	01/10/07	429.41								48.00	381.41	ENSR Transducer Present
		04/10/07	429.41	28.78	29.89	400.63	399.52	1.11	0.07	400.37			
		07/10/07	429.41	29.00	30.12	400.41	399.29	1.12	0.07	400.15			
MP-49 A	A Clay	01/10/07	431.07								10.98	420.09	DRY, TD= January 2007
		04/10/07	431.07		10.43		420.64	0.00	0.00	420.64			
	(PL in A Clay)	07/10/07	431.07										DRY
MP-49 B	Rand	01/10/07	431.08		23.18		407.90	0.00	0.00	407.90	23.91	407.17	
		04/10/07	431.08		22.34		408.74	0.00	0.00	408.74			
		07/10/07	431.08		22.69		408.39	0.00	0.00	408.39			
MP-49 C	Main Sand	01/10/07	431.07	34.33	35.83	396.74	395.24	1.50	0.19	396.40	43.26	387.81	
		04/10/07	431.07	31.07	31.39	400.00	399.68	0.32	0.02	399.93			
		07/10/07	431.07	30.77	32.14	400.30	398.93	1.37	0.16	399.98			
MP-50 A	A Clay	01/09/07	430.31								14.74	415.57	ENSR Transducer Present
		04/10/07	430.31		13.71		416.60	0.00	0.00	416.60			
		07/10/07	430.31		13.68		416.63	0.00	0.00	416.63			
MP-50 B	Rand	01/09/07	430.29								24.08	406.21	ENSR Transducer Present
		04/10/07	430.29		24.15		406.14	0.00	0.00	406.14			
		07/10/07	430.29		24.16		406.13	0.00	0.00	406.13			Will not be used in GW flow map. TD to be verified 10/07
MP-50 C	Main Sand	01/09/07	429.98								43.97	386.01	ENSR Transducer Present
		04/10/07	429.98										ENSR Transducer Present
		07/10/07	429.98										"Could not locate"
MP-51 A	A Clay	01/09/07	430.90								0.00		DRY
		04/10/07	430.90										
	(PL in A Clay)	07/10/07	430.90								9.80		DRY
MP-51 B	N. Olive	01/09/07	430.91								15.00	415.91	DRY, TD= January 2007
		04/10/07	430.91										
		07/10/07	430.91		14.96		415.95	0.00	0.00	415.95			
MP-51 C	Rand	01/09/07	430.93								24.63	406.30	DRY, TD= January 2007
		04/10/07	430.93										
		07/10/07	430.93		24.56		406.37	0.00	0.00	406.37			

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MP-51 D	Main Sand	01/09/07	430.99	34.61	36.25	396.38	394.74	1.64	0.22	396.00	42.90	388.09	
		04/10/07	430.99										
		07/10/07	430.99	30.89	32.75	400.10	398.24	1.86	0.32	399.67			
MP-52 A	A Clay	01/09/07	429.96								10.00	419.96	DRY, TD= January 2007
		04/10/07	429.96										DRY
	(PL in A Clay)	07/10/07	429.96								10.00		DRY
MP-52 B	Rand	01/09/07	429.97								22.65	407.32	DRY, TD= January 2007
		04/10/07	429.97										DRY
		07/10/07	429.97								22.63		DRY
MP-52 C	Main Sand	01/09/07	429.99	34.57	34.60	395.42	395.39	0.03	0.01	395.41	41.97	388.02	
		04/10/07	429.99	30.21	30.97	399.78	399.02	0.76	0.06	399.61			
		07/10/07	429.99	29.51	31.42	400.48	398.57	1.91	0.32	400.04			
MP-53 A	A Clay	01/09/07	430.59		11.69		418.90	0.00	0.00	418.90	11.76	418.83	
		04/10/07	430.59		11.36		419.23	0.00	0.00	419.23			
		07/10/07	430.59		11.24		419.35	0.00	0.00	419.35			
MP-53 B	Rand	01/09/07	430.60								24.51	406.09	DRY, TD= January 2007
		04/10/07	430.60										DRY
		07/10/07	430.60								24.49		DRY
MP-53 C	Main Sand	01/09/07	430.52	34.33	34.90	396.19	395.62	0.57	0.05	396.06	44.65	385.87	
		04/10/07	430.52		31.23		399.29	0.00	0.00	399.29			
		07/10/07	430.52	30.42	31.86	400.10	398.66	1.44	0.16	399.77			
MP-54 A	N. Olive	01/09/07	430.00								12.47	417.53	DRY, TD= January 2007
		04/10/07	430.00		12.42		417.58	0.00	0.00	417.58			
		07/10/07	430.00		12.42		417.58	0.00	0.00	417.58			
MP-54 B	Rand	01/09/07	429 99								24.40	405.59	DRY, TD= January 2007
		04/10/07	429.99								24.36		DRY
		07/10/07	429 99								24.36		DRY
MP-54 C	Main Sand	01/09/07	430.07	33.74	35.30	396.33	394.77	1.56	0.22	395.97	43.22	386.85	
		04/10/07	430.07		30.94		399.13	0.00	0.00	399.13			
		07/10/07	430.07	30.41	30 42	399.66	399.65	0.01	0.01	399.66			Sheen
MP-55 A	N. Olive/ B Clay	01/09/07	429.65		16.89		412.76	0.00	0.00	412.76	16.95	412.70	
		04/10/07	429.65		16.88		412.77	0.00	0.00	412 77			
		07/10/07	429.65		16.87		412.78	0.00	0.00	412.78			
MP-55 B	Rand	01/09/07	429 64		23.89		405 75	0.00	0.00	405.75	23.86	405.78	
		04/10/07	429.64		22.98		406.66	0.00	0.00	406.66			
		07/10/07	429.64		23.21		406.43	0.00	0.00	406.43			
MP-55 C	Main Sand	01/10/07	429.67	33.34	34.85	396.33	394.82	1 51	0.17	395.98	43.26	386.41	
		04/10/07	429.67		30.74		398.93	0 00	0.00	398.93			
		07/10/07	429.67	29.58	32 33	400.09	397.34	2.75	0 54	399.46			
MP-56 A	N. Olive	01/09/07	430.25		10.96		419.29	0.00	0.00	419.29	10.97	419.28	
		04/10/07	430.25		10.04		420.21	0.00	0.00	420.21			
		07/10/07	430.25		9.98		420.27	0.00	0.00	420.27			
MP-56 B	Rand	01/09/07	430.25								27.91	402.34	DRY, TD= January 2007
		04/10/07	430.25										DRY
		07/10/07	430.25								27.83		DRY
MP-56 C	Main Sand	01/09/07	430.15		33.98		396.17	0.00	0 00	396.17	44 88	385.27	
		04/10/07	430 15	30.86	30.87	399.29	399.28	0.01	0.01	399.29			
		07/10/07	430.15	30.19	30 96	399.96	399.19	0.77	0.06	399.78			

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MP-57 A	N. Olive	01/09/07	429.05								14.79	414.26	DRY, TD= January 2007
		04/10/07	429.05								14.78		DRY
		07/10/07	429.05										DRY
MP-57 B	Rand	01/09/07	429.04								24.29	404.75	DRY, TD= January 2007
		04/10/07	429.04								24.29	404.75	DRY
		07/10/07	429.04										DRY
MP-57 C	Main Sand	01/09/07	429.15	32.85	33.96	396.30	395.19	1.11	0.07	396.04	44.36	384.79	
		04/10/07	429.15	30.04	30.33	399.11	398.82	0.29	0.02	399.04			
		07/10/07	429.15	29.11	30.55	400.04	398.60	1.44	0.16	399.71			
MP-58 A	A Clay	01/09/07	430.29								10.02	420.27	DRY, TD= January 2007
		04/10/07	430.29								10.02		DRY
		07/10/07	430.29										DRY
MP-58 B	Main Silt	01/09/07	430.29								21.18	409.11	DRY, TD= January 2007
		04/10/07	430.29		21.03		409.26	0.00	0.00	409.26			
	(Rand Horizon)	07/10/07	430.29		21.04		409.25	0.00	0.00	409.25			
MP-58 C	Main Sand	01/09/07	430.33	33.88	34.03	396.45	396.30	0.15	0.01	396.42	39.02	391.31	
		04/10/07	430.33		30.76		399.57	0.00	0.00	399.57			
		07/10/07	430.33		30.11		400.22	0.00	0.00	400.22			
MP-59 A	A Clay	01/09/07	429.97								9.32	420.65	DRY, TD= January 2007
		04/10/07	429.97		8.82		421.15	0.00	0.00	421.15			
		07/10/07	429.97		8.39		421.58	0.00	0.00	421.58			
MP-59 B	Main Silt	01/09/07	429.88								17.86	412.02	DRY, TD= January 2007
		04/10/07	429.88								17.85		DRY
	(Rand Horizon)	07/10/07	429.88										DRY
MP-59 C	Main Sand	01/09/07	429.90	33.12	33.41	396.78	396.49	0.29	0.02	396.71	34.87	395.03	
		04/10/07	429.90		29.73		400.17	0.00	0.00	400.17			
		07/10/07	429.90		29.25		400.65	0.00	0.00	400.65			No tone, possible NAPL on probe
MP-60 A	A Clay	01/09/07	429.21								9.69	419.52	DRY, TD= January 2007
		04/10/07	429.21		7.79		421.31	0.00	0.00	421.31			
	(PL in A Clay)	07/10/07	429.21		9.21		420.00	0.00	0.00	420.00	9.76		
MP-60 B	Main Silt	01/09/07	429.20								20.70	408.50	DRY, TD= January 2007
		04/10/07	429.20		20.73		408.37	0.00	0.00	408.37			
	(Rand Horizon)	07/10/07	429.20		20.62		408.58	0.00	0.00	408.58			
MP-60 C	Main Sand	01/09/07	429.21	32.72	34.13	396.49	395.08	1.41	0.16	396.17	37.34	391.87	
		04/10/07	429.21	30.07	30.11	399.14	399.10	0.04	0.01	399.13			
		07/10/07	429.21	27.90	33.35	401.31	395.86	5.45	1.44	400.06			
MP-61 A	A Clay	01/09/07	429.98		10.17		419.81	0.00	0.00	419.81	10.31	419.67	
		04/10/07	429.98										DRY
	(PL in A Clay)	07/10/07	429.98		10.07		419.91	0.00	0.00	419.91			
MP-61 B	Main Silt	01/09/07	429.98								21.31	408.67	DRY, TD= January 2007
		04/10/07	429.98										DRY
	(Rand Horizon)	07/10/07	429.98										DRY
MP-61 C	Main Sand	01/09/07	430.00		33.08		396.92	0.00	0.00	396.92	37.02	392.98	
		04/10/07	430.00		30.06		399.94	0.00	0.00	399.94			
		07/10/07	430.00		28.71		401.29	0.00	0.00	401.29			
MP-62 A	A Clay	01/09/07	429.11		8.77		420.34	0.00	0.00	420.34	9.58	419.53	
		04/10/07	429.11		7.57		421.54	0.00	0.00	421.54			
	(PL in A Clay)	07/10/07	429.11		7.89		421.22	0.00	0.00	421.22			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_0 (ft)	Piezometric Surface Elevation (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing; Total Well Depth)	Comments
MP-62 B	Main Silt	01/09/07	429.11								18.15	410.96	DRY, TD= January 2007
		04/10/07	429.11								18.16		DRY
	(N. Olive Horizon)	07/10/07	429.11										DRY
MP-62 C	Main Sand	01/09/07	428.94		32.21		396.73	0.00	0.00	396.73	37.02	391.92	
		04/10/07	428.94		29.09		399.85	0.00	0.00	399.85			
		07/10/07	428.94		28.27		400.67	0.00	0.00	400.67			
MP-63 A	A Clay	01/09/07	429.26								9.84	419.42	DRY, TD= January 2007
		04/10/07	429.26		9.05		420.21	0.00	0.00	420.21			
		07/10/07	429.26		9.19		420.07	0.00	0.00	420.07			
MP-63 B	Main Silt	01/10/07	429.26								19.79	409.47	DRY, TD= January 2007
		04/10/07	429.26		19.66		409.60	0.00	0.00	409.60			
	(N. Olive Horizon)	07/10/07	429.26										DRY
MP-63 C	Main Sand	01/09/07	429.29		32.69		396.60	0.00	0.00	396.60	36.82	392.47	
		04/10/07	429.29		29.83		399.46	0.00	0.00	399.46			
		07/10/07	429.29		28.91		400.38	0.00	0.00	400.38			
MP-64 A	A Clay	01/09/07	428.73		9.61		419.12	0.00	0.00	419.12	9.62	419.11	
		04/10/07	428.73								9.64		DRY
	(PL in A Clay)	07/10/07	428.73		9.56		419.17	0.00	0.00	419.17			
MP-64 B	Main Silt	01/09/07	428.74		21.31		407.43	0.00	0.00	407.43	21.40	407.34	
		04/10/07	428.74		21.33		407.41	0.00	0.00	407.41			
	(N. Olive Horizon)	07/10/07	428.74										DRY
MP-64 C	Main Sand	01/09/07	428.55	31.76	33.26	396.79	395.29	1.50	0.19	396.45	36.70	391.85	
		04/10/07	428.55	29.29	29.54	399.26	399.01	0.25	0.02	399.20			
		07/10/07	428.55		28.36		400.19	0.00	0.00	400.19			
MP-65 A	Main Silt	01/09/07	431.41		16.20		415.21	0.00	0.00	415.21	16.30	415.11	
		04/10/07	431.41		16.28		415.13	0.00	0.00	415.13			
	(N. Olive Horizon)	07/10/07	431.41		16.31		415.10	0.00	0.00	415.10	16.39		
MP-65 B	Main Sand	01/09/07	431.44								24.75	406.69	DRY, TD= January 2007
		04/10/07	431.44										DRY
		07/10/07	431.44										DRY
MP-65 C	Main Sand	01/09/07	431.42		33.85		397.57	0.00	0.00	397.57	40.05	391.37	
		04/10/07	431.42		30.08		401.34	0.00	0.00	401.34			
		07/10/07	431.42		29.66		401.76	0.00	0.00	401.76			
MP-66 A	Main Silt	01/10/07	430.81		14.22		416.59	0.00	0.00	416.59	14.39	416.42	
		04/10/07	430.81		14.15		416.66	0.00	0.00	416.66			
	(N. Olive Horizon)	07/10/07	430.81		14.19		416.62	0.00	0.00	416.62			
MP-66 B	Main Silt	01/09/07	430.82		25.16		405.66	0.00	0.00	405.66	25.43	405.39	
		04/10/07	430.82		25.25		405.57	0.00	0.00	405.57			
	(Rand Horizon)	07/10/07	430.82		25.18		405.64	0.00	0.00	405.64			
MP-66 C	Main Sand	01/09/07	430.79		33.38		397.41	0.00	0.00	-397.41	39.94	390.85	
		04/10/07	430.79		30.90		399.89	0.00	0.00	399.89			
		07/10/07	430.79		29.06		401.73	0.00	0.00	401.73			
MP-67 A	A Clay	01/09/07	430.29		9.86		420.43	0.00	0.00	420.43	9.98	420.31	
		04/10/07	430.29		9.85		420.44	0.00	0.00	420.44			
	(PL in A Clay)	07/10/07	430.29		9.88		420.41	0.00	0.00	420.41			
MP-67 B	Main Silt	01/09/07	430.31		25.38		404.93	0.00	0.00	404.93	25.49	404.82	
		04/10/07	430.31		25.35		404.96	0.00	0.00	404.96			
	(Rand Horizon)	07/10/07	430.31		25.38		404.93	0.00	0.00	404.93			

TABLE 2
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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-67 C	Main Sand	01/09/07	430.19		33.30		396.89	0.00	0.00	396.89	39.82	390.37	
		04/10/07	430.19		30.75		399.44	0.00	0.00	399.44			
		07/10/07	430.19		29.54		400.65	0.00	0.00	400.65			
MP-68 A	N. Olive	01/10/07	431.36								17.73	413.63	DRY, TD= January 2007
		04/11/07	431.36								16.74		DRY
		07/10/07	431.36										DRY
MP-69 A	N. Olive	01/10/07	431.57								16.29	415.28	DRY, TD= January 2007
		04/11/07	431.57										DRY
		07/10/07	431.57										DRY
MP-70 A	N. Olive	01/10/07	431.00								15.97	415.03	DRY, TD= January 2007
		04/11/07	431.00										DRY
		07/10/07	431.00										DRY
MP-71 A	N. Olive	01/10/07	430.14								14.74	415.40	DRY, TD= January 2007
		04/10/07	430.14										DRY
		07/10/07	430.14										DRY
MP-72 A	N. Olive	01/10/07	430.51								15.74	414.77	DRY, TD= January 2007
		04/10/07	430.51										DRY
		07/10/07	430.51										DRY
MP-73 A	N. Olive	01/10/07	430.84								16.83	414.01	DRY, TD= January 2007
		04/10/07	430.84										DRY
		07/10/07	430.84										DRY
MP-74 A	N. Olive	01/10/07	431.38								17.79	413.59	DRY, TD= January 2007
		04/10/07	431.38										DRY
		07/10/07	431.38										DRY
MP-75 A	N. Olive	01/10/07	430.66								18.19	412.47	DRY, TD= January 2007
		04/10/07	430.66		16.88		413.78	0.00	0.00	413.78			
		07/10/07	430.66		18.02		412.64	0.00	0.00	412.64			
MP-76 A	N. Olive	01/10/07	430.75								17.36	413.39	DRY, TD= January 2007
		04/11/07	430.75										DRY
		07/10/07	430.75										DRY
MP-77A	A Clay	01/09/07	430.53								10.50	420.03	DRY, TD= January 2007
		04/10/07	430.53										DRY
		07/10/07	430.53								10.48		DRY
MP-77B	Main Silt	01/09/07	430.62		24.58		406.04	0.00	0.00	406.04	24.67	405.95	
		04/10/07	430.62		24.53		406.09	0.00	0.00	406.09			
	(Rand Horizon)	07/10/07	430.62		24.59		406.03	0.00	0.00	406.03			
MP-77C	Main Sand	01/09/07	430.46	33.89	34.95	396.57	395.51	1.06	0.07	396.33	38.76	391.70	
		04/10/07	430.46	30.61	31.20	399.85	399.26	0.59	0.05	399.71			
		07/10/07	430.46	30.04	31.36	400.42	399.10	1.32	0.13	400.12			
MP-78 A	A Clay	01/10/07	430.38								7.97	422.41	DRY, TD= January 2007
		04/11/07	430.38		7.86		422.52	0.00	0.00	422.52			
		07/10/07	430.38		7.91		422.47	0.00	0.00	422.47			
MP-78 B	N. Olive	01/10/07	430.23								13.83	416.40	DRY, TD= January 2007
		04/11/07	430.23		13.76		416.47	0.00	0.00	416.47			
		07/10/07	430.23										DRY
MP-78 C	Rand	01/10/07	430.29		24.08		406.21	0.00	0.00	406.21	24.23	406.06	
		04/11/07	430.29		24.07		406.22	0.00	0.00	406.22			
		07/10/07	430.29		24.11		406.18	0.00	0.00	406.18			

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MP-78 D	Main Sand	01/10/07	430.17		34.23		395.94	0.00	0.00	395.94	37.86	392.31	
		04/11/07	430.17		30.13		400.04	0.00	0.00	400.04			
		07/10/07	430.17		30.91		399.26	0.00	0.00	399.26			
MP-79 A	N. Olive	01/10/07	429.44								16.84	412.60	DRY, TD= January 2007
		04/10/07	429.44								16.85		DRY
		07/10/07	429.44										DRY
MP-79 B	Rand	01/10/07	429.48								28.88	400.60	DRY, TD= January 2007
		04/10/07	429.48								25.87	403.61	DRY
		07/10/07	429.48		26.74		402.74	0.00	0.00	402.74			Will not be used in GW flow map. TD to be verified 10/07
MP-79 C	Main Sand	01/11/07	429.52	32.27	36.58	397.25	392.94	4.31	1.07	396.26	37.20	392.32	
		04/10/07	429.52	27.99	34.40	401.53	395.12	6.41	1.60	400.06			
		07/10/07	429.52	28.19	35.51	401.33	394.01	7.32	1.60	399.65			
MP-79 D	Main Sand	01/10/07	429.46		33.42		396.04	0.00	0.00	396.04	50.65	378.81	
		04/10/07	429.46		29.63		399.83	0.00	0.00	399.83			
		07/10/07	429.46		30.07		399.39	0.00	0.00	399.39			
MP-80 A	N. Olive	01/10/07	430.03		18.85		411.18	0.00	0.00	411.18	18.79	411.24	
		04/11/07	430.03										DRY
		07/10/07	430.03										DRY
MP-80 B	Rand	01/10/07	430.01		27.56		402.54	0.00	0.00	402.54	29.53	400.57	
		04/11/07	430.01		22.72		407.38	0.00	0.00	407.38			
		07/10/07	430.01		21.68		408.33	0.00	0.00	408.33			
MP-80 C	Main Sand	01/10/07	430.03	33.61	35.14	396.42	394.89	1.53	0.19	396.07	43.60	386.43	
		04/11/07	430.03	28.75	34.25	401.28	395.78	5.50	1.44	400.02			
		07/10/07	430.03	28 48	36.59	401.55	393.44	8.11	1.60	399.68			
MP-81 A	A Clay	01/10/07	425.57								7.65	417.92	DRY, TD= January 2007
		04/10/07	425.57								7.62		DRY
	(PL in A Clay)	07/10/07	425.57										DRY
MP-81 B	Main Silt	01/10/07	425.53								18.72	406.81	DRY, TD= January 2007
		04/10/07	425.53								18.69	406.84	DRY
	(Rand Horizon)	07/10/07	425.53										DRY
MP-81 C	Main Sand	01/10/07	425.40		28.58		396.82	0.00	0.00	396.82	32.37	393.03	
		04/10/07	425.40		24.75		400.65	0.00	0.00	400.65			
		07/10/07	425.40		24.51		400.89	0.00	0.00	400.89			
MP-82 A	A Clay	01/10/07	431.67								10.62	421.05	
		04/10/07	431.67										DRY
	(PL in A Clay)	07/10/07	431.67								10.62		DRY
MP-82 B	Main Silt	01/10/07	431.58								25.77	405.81	
		04/10/07	431.58		25.57		406.01	0.00	0.00	406.01			
	(Rand Horizon)	07/10/07	431.58		25.59		405.99	0.00	0.00	405.99	25.72		
MP-82 C	Main Sand	01/10/07	431.61		34.88		396.73	0.00	0.00	396.73	38.64	392.97	
		04/10/07	431.61		31.23		400.38	0.00	0.00	400.38			
		07/10/07	431.61	31.00	31.19	400.61	400.42	0.19	0.02	400.57			
MP-83 A	N. Olive	01/10/07	426.92								15.35	411.57	DRY, TD= January 2007
		04/10/07	426.92								15.37		DRY
		07/10/07	426.92										DRY
MP-83 B	Rand	01/10/07	426.94								23.50	403.44	DRY, TD= January 2007
		04/10/07	426.94								23.54	403.40	DRY
		07/10/07	426.94										DRY

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-83 C	Main Sand	01/10/07	426.79		30.66		396.13	0.00	0.00	396.13	41.98	384.81	
		04/10/07	426.79		26.66		400.13	0.00	0.00	400.13			
		07/10/07	426.79		27.26		399.53	0.00	0.00	399.53			
MP-84 A	A Clay	01/10/07	432.08								8.57	423.51	DRY, TD= January 2007
		04/10/07	432.08		8.56		423.52	0.00	0.00	423.52			
	(PL in A Clay)	07/10/07	432.08		8.52		423.56	0.00	0.00	423.56			
MP-84 B	Main Silt	01/10/07	432.07		25.45		406.62	0.00	0.00	406.62	25.35	406.72	
		04/10/07	432.07		25.43		406.64	0.00	0.00	406.64			
	(Rand Horizon)	07/10/07	432.07										DRY
MP-84 C	Main Silt	01/10/07	432.10	35.27	36.99	396.83	395.11	1.72	0.25	396.43	37.80	394.30	
	(Rand Horizon)/	04/10/07	432.10	32.06	32.18	400.04	399.92	0.12	0.01	400.01			
	Main Sand	07/10/07	432.10	31.70	32.32	400.40	399.78	0.62	0.05	400.26			
MP-85 A	N. Olive	01/09/07	428.07		10.16		417 91	0.00	0.00	417.91	10.30	417.77	
		04/10/07	428.07		8.73		419.34	0.00	0.00	419.34			
		07/10/07	428.07		8.54		419.53	0.00	0.00	419.53			
MP-85 B	Rand	01/09/07	428.06		17.31		410.75	0.00	0.00	410.75	20.54	407.52	
		04/10/07	428.06		16.01		412.05	0.00	0.00	412.05			
		07/10/07	428.06		15.06		413.00	0.00	0.00	413.00			
MP-85 C	EPA	01/09/07	428.08	32.10	32.26	395.98	395.82	0.16	0.01	395.94	36.00	392.08	
		04/10/07	428.08		29.05		399.03	0.00	0.00	399.03			
		07/10/07	428.08		28.98		399.10	0.00	0.00	399.10			WELL BUBBLING
MP-85 D	Main Sand	01/09/07	427.86		32.09		395.77	0.00	0.00	395.77	49.55	378.31	
		04/10/07	427.86		28.73		399.13	0.00	0.00	399.13			
	(below D Clay)	07/10/07	427.86		28.86		399.00	0.00	0.00	399.00			
MP-86 A	A Clay	01/10/07	431.31								7.50	423.81	DRY, TD= January 2007
		04/10/07	431.31		7.45		423.86	0.00	0.00	423.86			
	(PL in A Clay)	07/10/07	431.31										DRY
MP-86 B	Main Silt	01/10/07	431.28		25.53		405.75	0.00	0 00	405.75	25.61	405.67	
		04/10/07	431.28		25.49		405.79	0.00	0.00	405.79			
	(Rand Horizon)	07/10/07	431.28		25.52		405.76	0.00	0.00	405.76	25.62		
MP-86 C	Main Sand	01/10/07	431.20	34.48	34.62	396.72	396.58	0.14	0.01	396.69	39.23	391.97	
		04/10/07	431.20		30.80		400.40	0.00	0.00	400.40			
		07/10/07	431.20	30.66	30.81	400.54	400.39	0.15	0.02	400.51			
MP-87 A	A Clay	01/10/07	432.01								6.58	425.43	
		04/10/07	432.01								6.56		DRY
	(PL in A Clay)	07/10/07	432.01										DRY
MP-87 B	Main Silt	01/10/07	432.01								25.62	406.39	
		04/10/07	432.01		25.51		406.50	0.00	0.00	406.50			
	(Rand Horizon)	07/10/07	432.01		25.50		406.51	0.00	0.00	406.51			
MP-87 C	Main Sand	01/10/07	432.08								39.69	392.39	
		04/10/07	432.08	31.89	32.69	400.19	399.39	0.80	0.06	400.01			
		07/10/07	432.08	31.55	32.86	400.53	399.22	1.31	0.13	400.23			
MP-88 A	A Clay	01/09/07	430.60								9.84	420.76	DRY, TD= January 2007
		04/10/07	430.60		9.79		420.81	0.00	0.00	420.81			
		07/10/07	430.60		9.66		420.94	0.00	0.00	420.94			
MP-88 B	Main Silt	01/09/07	430 60								19.71	410.89	DRY, TD= January 2007
		04/10/07	430.60		19.60		411.00	0.00	0.00	411.00			
	(Rand Horizon)	07/10/07	430.60		19.60		411.00	0.00	0.00	411.00			

TABLE 2
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
The Hartford Area Hydrocarbon Plume Site

1190505040 – Madison County – ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
MP-88 C	Main Sand	01/09/07	430.51	33.76	34.02	396.75	396.49	0.26	0.02	396.69	38.67	391.84	
		04/10/07	430.51		30.52		399.99	0.00	0.00	399.99			
		07/10/07	430.51	29.87	30.12	400.64	400.39	0.25	0.02	400.58			
MP-89 A	A Clay	01/09/07	429.17		9.72		419.45	0.00	0.00	419.45	9.76	419.41	
		04/10/07	429.17		7.95		421.22	0.00	0.00	421.22			
		07/10/07	429.17		9.06		420.11	0.00	0.00	420.11			
MP-89 B	Main Silt	01/09/07	429.17								19.78	409.39	DRY, TD= January 2007
		04/10/07	429.17								19.78		DRY
	(Rand Horizon)	07/10/07	429.17										DRY
MP-89 C	Main Sand	01/09/07	429.25		32.45		396.80	0.00	0.00	396.80	37.88	391.37	
		04/10/07	429.25		29.48		399.77	0.00	0.00	399.77			
		07/10/07	429.25		28.35		400.90	0.00	0.00	400.90			
MP-90 B	Main Silt		430.18									430.18	Well Abandoned in 2006
	(N. Olive Horizon)												
MP-90 BR	Main Silt	01/10/07	429.95								15.92	414.03	DRY, TD= January 2007
		04/10/07	429.95								15.90		DRY
	(N. Olive Horizon)	07/10/07	429.95										DRY
MP-90 C	Main Silt	01/10/07	429.95	33.18	34.13	396.77	395.82	0.95	0.08	396.55	40.26	389.69	
	(Rand Horizon)/	04/10/07	429.95	29.39	30.39	400.56	399.56	1.00	0.08	400.33			
	Main Sand	07/10/07	429.95	29.20	31.10	400.75	398.85	1.90	0.32	400.31			
MP-91 B	Main Silt	01/10/07	425.98								14.49	411.49	DRY, TD= January 2007
		04/10/07	425.98								14.48		DRY
	(N. Olive Horizon)	07/10/07	425.98										DRY
MP-91 C	Main Silt	01/10/07	425.98								27.70	398.28	DRY, TD= January 2007
		04/11/07	425.98		26.24		399.74	0.00	0.00	399.74			
		07/10/07	425.98	25.32	25.60	400.66	400.38	0.28	0.02	400.60			
MP-91 D	Main Sand	01/10/07	425.96		29.51		396.45	0.00	0.00	396.45	44.24	381.72	
		04/10/07	425.96		25.41		400.55	0.00	0.00	400.55			
		07/10/07	425.96		25.60		400.36	0.00	0.00	400.36			
MP-92 C	N. Olive	01/10/07	427.71		19 88		407.83	0.00	0.00	407.83	19.91	407.80	
		04/10/07	427.71		19.81		407.90	0.00	0.00	407.90			
		07/10/07	427.71		19.83		407.88	0.00	0.00	407.88			
MP-92 D	Main Silt	01/10/07	427.98		31.15		396 83	0.00	0.00	396.83	36.65	391.33	
	(Rand Horizon)/	04/10/07	427.98		27.08		400.90	0.00	0.00	400.90			
	Main Sand	07/10/07	427.98		27.30		400.68	0.00	0.00	400.68			
MP-93A	Fill/ A Clay	01/10/07	429.74								6.10	423.64	DRY, TD= January 2007
		04/10/07	429.74								6.11		DRY
		07/10/07	429.74										DRY
MP-93B	A Clay	01/10/07	429.84								11.68	418.16	DRY, TD= January 2007
		04/10/07	429.84								11.69	418.15	DRY
		07/10/07	429 84										DRY
MP-94A	A Clay	01/09/07	428.63		8.53		420.10	0.00	0.00	420.10	9.73	418.90	
		04/10/07	428.63		8.11		420.52	0.00	0.00	420.52			
		07/10/07	428.63		8.90		419.73	0.00	0.00	419.73			
MP-94B	Main Silt	01/09/07	428.72		17.79		410.93	0.00	0.00	410.93	17.82	410.90	
		04/10/07	428.72		17.79		410.93	0.00	0.00	410.93			
		07/10/07	428.72		17.80		410.92	0.00	0.00	410.92			

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1190505040 -- Madison County -- ILR 000128249
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MP-95A	A Clay	01/09/07	428.60								9.66	418.94	DRY, TD= January 2007
		04/10/07	428.60		9.37		419.23	0.00	0.00	419.23			
		07/10/07	428.60		9.19		419.41	0.00	0.00	419.41			
MP-95B	Main Silt	01/09/07	428.67		16.69		411.98	0.00	0.00	411.98	16.73	411.94	
		04/10/07	428.67		16.71		411.96	0.00	0.00	411.96			
		07/10/07	428.67		16.70		411.97	0.00	0.00	411.97			
MP-96A	A Clay	01/09/07	429.42		5.08		424.34	0.00	0.00	424.34	5.10	424.32	
		04/10/07	429.42								5.11		DRY
		07/10/07	429.42										DRY
MP-96B	N. Olive	01/09/07	429.57								14.56	415.01	DRY, TD= January 2007
		04/10/07	429.57								14.58	414.99	DRY
		07/10/07	429.57										DRY
MP-96C	Rand	01/09/07	429.38		23.57		405.81	0.00	0.00	405.81	23.67	405.71	
		04/10/07	429.38		23.57		405.81	0.00	0.00	405.81			
		07/10/07	429.38										DRY
MP-96D	Main Sand	01/09/07	429.48	33.26	34.38	396.22	395.10	1.12	0.07	395.96	34.58	394.90	
		04/10/07	429.48	30.55	31.47	398.93	398.01	0.92	0.07	398.72			
		07/10/07	429.48	29.71	31.43	399.77	398.05	1.72	0.25	399.37			
MP-97A	A Clay	01/09/07	429.33								4.78	424.55	DRY, TD= January 2007
		04/10/07	429.33								4.79		DRY
		07/10/07	429.33										DRY
MP-97B	N. Olive	01/09/07	429.31		15.58		413.73	0.00	0.00	413.73	15.65	413.66	
		04/10/07	429.31		15.56		413.75	0.00	0.00	413.75			
		07/10/07	429.31		15.57		413.74	0.00	0.00	413.74			
MP-97C	Rand	01/09/07	429.30								23.72	405.58	DRY, TD= January 2007
		04/10/07	429.30								23.73		DRY
		07/10/07	429.30										DRY
MP-97D	Main Sand	01/09/07	429.31	33.09	34.73	396.22	394.58	1.64	0.22	395.84	40.14	389.17	
		04/10/07	429.31	30.37	31.12	398.94	398.19	0.75	0.06	398.77			
		07/10/07	429.31	29.56	31.25	399.75	398.06	1.69	0.25	399.36			
MP-98A	A Clay	01/09/07	429.40								4.66	424.74	DRY, TD= January 2007
		04/10/07	429.40								4.67		DRY
		07/10/07	429.40										DRY
MP-98B	N. Olive	01/09/07	429.38								15.29	414.09	DRY, TD= January 2007
		04/10/07	429.38								15.31	414.07	DRY
		07/10/07	429.38										DRY
MP-98C	Rand	01/09/07	429.38								23.79	405.59	DRY, TD= January 2007
		04/10/07	429.38								23.80	405.58	DRY
		07/10/07	429.38										DRY
MP-99A	A Clay	01/10/07	431.59		6.88		424.71	0.00	0.00	424.71	6.89	424.70	
		04/10/07	431.59		6.84		424.75	0.00	0.00	424.75			
		07/10/07	431.59										DRY
MP-99B	Main Silt	01/10/07	431.58		13.28		418.30	0.00	0.00	418.30	13.35	418.23	
		04/10/07	431.58		13.24		418.34	0.00	0.00	418.34			
		07/10/07	431.58		13.25		418.33	0.00	0.00	418.33			
MP-99C	Main Sand	01/10/07	431.56		34.61		396.95	0.00	0.00	396.95	34.70	396.86	
		04/10/07	431.56		31.25		400.31	0.00	0.00	400.31			
		07/10/07	431.56	31.04	31.05	400.52	400.51	0.01	0.01	400.52			

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MP-100A	Fill	01/10/07	431.55								4.19	427.36	DRY, TD= January 2007
		04/10/07	431.55								4.18		DRY
		07/10/07	431.55										DRY
MP-100B	A Clay	01/10/07	431.62								7.23	424.39	DRY, TD= January 2007
		04/10/07	431.62								7.25	424.37	DRY
		07/10/07	431.62								7.25		DRY
MP-100C	Main Silt	01/10/07	431.67		13.21		418.46	0.00	0.00	418.46	13.27	418.40	
		04/10/07	431.67		13.23		418.44	0.00	0.00	418.44			
		07/10/07	431.67		13.23		418.44	0.00	0.00	418.44	13.27		
MP-100D	Main Sand	01/10/07	431.65		34.43		397.22	0.00	0.00	397.22	34.53	397.12	
		04/10/07	431.65		31.34		400.31	0.00	0.00	400.31			
		07/10/07	431.65	31.12	31.17	400.53	400.48	0.05	0.01	400.52			
MP-101A	A Clay	01/10/07	431.29								7.88	423.41	
		04/10/07	431.29										
		07/10/07	431.29		6.96		424.33	0.00	0.00	424.33			
MP-101B	Main Silt	01/10/07	431.30								13.92	417.38	
		04/10/07	431.30										
		07/10/07	431.30										DRY
MP-101C	Main Sand	01/10/07	431.31								34.60	396.71	
		04/10/07	431.31										
		07/10/07	431.31	30.78	30.99	400.53	400.32	0.21	0.02	400.48			
MP-102A	A Clay	01/10/07	431.14								7.77	423.37	
		04/10/07	431.14		7.71		423.43	0.00	0.00	423.43			
		07/10/07	431.14		7.51		423.63	0.00	0.00	423.63			
MP-102B	Main Silt	01/10/07	431.13								14.33	416.80	
		04/10/07	431.13		14.67		416.46	0.00	0.00	416.46			
		07/10/07	431.13		14.70		416.43	0.00	0.00	416.43			Will not be used in GW flow map. TD to be verified 10/07
MP-102C	Main Sand	01/10/07	431.13								34.55	396.58	
		04/10/07	431.13		30.71		400.42	0.00	0.00	400.42			
		07/10/07	431.13		30.40		400.73	0.00	0.00	400.73			
MP-103A	A Clay	01/10/07	431.23								7.81	423.42	DRY, TD= January 2007
		04/10/07	431.23								7.81		DRY
		07/10/07	431.23										DRY
MP-103B	Main Silt	01/10/07	431.25		14.53		416.72	0.00	0.00	416.72	14.59	416.66	
		04/10/07	431.25		14.53		416.72	0.00	0.00	416.72			
		07/10/07	431.25		14.58		416.67	0.00	0.00	416.67			
MP-103C	Main Sand	01/10/07	431.24		34.52		396.72	0.00	0.00	396.72	34.92	396.32	
		04/10/07	431.24		30.83		400.41	0.00	0.00	400.41			
		07/10/07	431.24		30.60		400.64	0.00	0.00	400.64			
MP-104A	A Clay	01/10/07	431.26		6.96		424.30	0.00	0.00	424.30	7.78	423.48	
		04/10/07	431.26		7.40		423.86	0.00	0.00	423.86			
		07/10/07	431.26		7.56		423.70	0.00	0.00	423.70			
MP-104B	Main Silt	01/10/07	431.29		14.35		416.94	0.00	0.00	416.94	14.43	416.86	
		04/10/07	431.29		14.34		416.95	0.00	0.00	416.95			
		07/10/07	431.29		14.36		416.93	0.00	0.00	416.93			
MP-104C	Main Sand	01/10/07	431.25		34.51		396.74	0.00	0.00	396.74	34.60	396.65	
		04/10/07	431.25		30.88		400.37	0.00	0.00	400.37			
		07/10/07	431.25		30.67		400.58	0.00	0.00	400.58			

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MP-105A	A Clay / N. Olive	01/09/07	430.95								9.70	421.25	DRY, TD= January 2007
		04/10/07	430.95								9.70		DRY
		07/10/07	430.95								9.70		DRY
MP-105B	A Clay / N. Olive	01/09/07	431.36								9.40	421.96	DRY, TD= January 2007
		04/10/07	431.36								9.42	421.94	DRY
		07/10/07	431.36								9.39		DRY
MP-105C	A Clay / N. Olive	01/09/07	431.35								9.35	422.00	DRY, TD= January 2007
		04/10/07	431.35								9.35	422.00	DRY
		07/10/07	431.35								9.37		DRY
MP-105D	A Clay / N. Olive	01/09/07	431.43		9.23		422.20	0.00	0.00	422.20	11.13	420.30	
		04/10/07	431.43								9.23	422.20	DRY
		07/10/07	431.43								9.25		DRY
MP-105E	A Clay / N. Olive	01/09/07	431.46								9.50	421.96	DRY, TD= January 2007
		04/10/07	431.46								9.51	421.95	DRY
		07/10/07	431.46								9.51		DRY
MP-106A	A Clay	01/09/07	429.49								5.25	424.24	DRY, TD= January 2007
		04/10/07	429.49								5.24		DRY
		07/10/07	429.49								5.23		DRY
MP-106B	N. Olive	01/09/07	429.48								13.65	415.83	DRY, TD= January 2007
		04/10/07	429.48								13.68		DRY
		07/10/07	429.48								13.65		DRY
MP-106C	Rand	01/09/07	429.49		22.70		406.79	0.00	0.00	406.79	22.71	406.78	
		04/10/07	429.49		19.91		409.58	0.00	0.00	409.58			
		07/10/07	429.49		19.83		409.66	0.00	0.00	409.66			
MP-107A	A Clay	01/09/07	429.76		4.89		424.87	0.00	0.00	424.87	5.22	424.54	
		04/10/07	429.76		4.95		424.81	0.00	0.00	424.81			
		07/10/07	429.76		5.21		424.55	0.00	0.00	424.55			
MP-107B	N. Olive	01/09/07	429.80								13.29	416.51	DRY, TD= January 2007
		04/10/07	429.80								13.26		DRY
		07/10/07	429.80								13.25		DRY
MP-107C	Rand	01/09/07	429.74								21.85	407.89	DRY, TD= January 2007
		04/10/07	429.74		21.68		408.06	0.00	0.00	408.06			
		07/10/07	429.74								21.81		DRY
MP-108A	A Clay	01/09/07	429.57								5.15	424.42	DRY, TD= January 2007
		04/10/07	429.57								5.15		DRY
		07/10/07	429.57								5.15		DRY
MP-108B	N. Olive	01/09/07	429.62								13.75	415.87	DRY, TD= January 2007
		04/10/07	429.62		13.15		416.47	0.00	0.00	416.47			
		07/10/07	429.62								13.73		DRY
MP-108C	Rand	01/09/07	429.60		21.72		407.88	0.00	0.00	407.88	21.70	407.90	
		04/10/07	429.60								21.70		DRY
		07/10/07	429.60								21.70		DRY
RW-1	Main Sand	01/10/07	433.78	37.08	37.48	396.70	396.30	0.40	0.03	396.61		433.78	DRY
		04/10/07	433.78	33.52	33.67	400.26	400.11	0.15	0.01	400.23			
		07/10/07	433.78	33.38	33.39	400.40	400.39	0.01	0.01	400.40			
RW-2	Main Sand	01/10/07	431.99	35.85	36.62	396.14	395.37	0.77	0.06	395.96	50.44	381.55	
		04/10/07	431.99	32.61	33.41	399.38	398.58	0.80	0.06	399.20			
		07/10/07	431.99	32.30	33.09	399.69	398.90	0.79	0.06	399.51			

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WELL	STRATUM SCREENED	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	D_o[1] (ft)	Piezometric Surface Elevation[2] (ft)	Total Depth (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
RW-3	Main / potentially other hydrostratigraphic unit	01/10/07	433.35	37.27	37.98	396.08	395.37	0.71	0.05	395.92	47.15	386.20	
		04/10/07	433.35	33.87	34.19	399.48	399.16	0.32	0.02	399.41			
		07/10/07	433.35	34.04	34.31	399.31	399.04	0.27	0.02	399.25			
RW-4	Rand/ C Clay/ Main Sand	01/09/07	429.65		33.64		396.01	0.00	0.00	396.01	43.11	386.54	
		04/10/07	429.65		20.44		409.21	0.00	0.00	409.21			
		07/10/07	429.65		30.25		399.40	0.00	0.00	399.40			
RW-4 A*	Rand/ C Clay/ Main Sand	01/09/07	429.86								44.29	385.57	Skimmer Pump in Well
		04/10/07	429.86										Skimmer Pump in Well
		07/10/07	429.86	30.50	30.62	399.36	399.24	0 12	0.01	399.33			
RW-5	Rand/ C Clay/ Main Sand	01/09/07	430.22	33.98	35.27	396.24	394.95	1.29	0.13	395.94	44.10	386.12	
		04/10/07	430.22	30.88	31.51	399.34	398.71	0.63	0.05	399.20			
		07/10/07	430.22	30.36	31.92	399.86	398.30	1.56	0.22	399.50			
River Elevation	NA	01/09/07					402.74						
		04/10/07					411.61						
		07/10/07					404.12						

NOTES:
NA = Not Applicable
= No data or DRY (See Comments)
PL = Permeable Lense
SG = Specific gravity of hydrocarbon determined to be an average of 0.77 for data recorded during and after 09/03
(T xx/xx/xxxx) = Date transducer installed in well, however, data may be from miniTROLL or manual gauging
1 = D_o is a normalized volume of LNAPL (ft^3/ft^2) per unit surface area, but is expressed as a thickness (in units of feet)
2 = Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]
MP-5 through 28 installed as vacuum monitoring probes by Clayton in 7/03 and are not appropriate for determining groundwater flow
HMW-30 through 37, RW-4 and RMW-4A installed as pilot test wells by Clayton in 2004 and are not appropriate for determining groundwater flow
TOC elevations surveyed to USGS datum by CMT
Total Depths listed in January 2007 are from July 2006 unless otherwise indicated
For D_o (7-10-07), URS used Clayton's "Do Calculation Table (rev. 10-11-06)" to populate column

TABLE 3
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
P-47	NA		428.20								428.20	
											0.00	
P-51	NA		426.62								426.62	
											0.00	
P-76	EPA/ D Clay/		433.28							63.09	370.19	Abandoned by Shell in 12/2005
	Main Sand										0.00	
P-77	Main Sand	01/09/07	434.71		39.03		395.68	0.00	395.68	72.52	362.19	
		04/10/07	434.71		36.32		398.39	0.00	398.39			
	(below D Clay)	07/10/07	434.71		35.81		398.90	0.00	398.90		434.71	Lock Rusted/Unlocked.
P-78	Main Sand	01/09/07	433.33		37.70		395.63	0.00	395.63	67.50	365.83	
		04/10/07	433.33		35.97		397.36	0.00	397.36			
	(below D Clay)	07/10/07	433.33		34.45		398.88	0.00	398.88		433.33	
P-79	Main Sand	01/09/07	432.72		37.04		395.68	0.00	395.68	62.51	370.21	
		04/10/07	432.72		34.26		398.46	0.00	398.46			
	(below D Clay)	07/10/07	432.72		33.74		398.98	0.00	398.98		432.72	Lock Rusted/Unlocked.
P-80	Main Sand	01/09/07	433.10		37.54		395.56	0.00	395.56	64.40	368.70	
		04/10/07	433.10		34.70		398.40	0.00	398.40			
	(below D Clay)	07/10/07	433.10		34.14		398.96	0.00	398.96		433.10	No Lock.
P-81	EPA	01/09/07	433.26	37.28	39.01	395.98	394.25	1.73	395.53	43.10	390.16	
		04/10/07	433.26		35.82		397.44	0.00	397.44			
		07/10/07	433.26		33.55		399.71	0.00	399.71		433.26	Visual evidence of product on probe. No Lock.
P-104	N. Olive/ B Clay	01/09/07	432.74		24.55		408.19	0.00	408.19	27.75	404.99	
		04/10/07	432.74		18.53		414.21	0.00	414.21			
	Rand	07/10/07	432.74		18.75		413.99	0.00	413.99		432.74	
P-105	EPA	01/09/07	432.59		36.53		396.06	0.00	396.06	39.76	392.83	
		04/10/07	432.59		34.17		398.42	0.00	398.42			
		07/10/07	432.59		30.84		401.75	0.00	401.75		432.59	No Lock.
P-106	Main Sand	01/09/07	432.70		36.99		395.71	0.00	395.71	53.60	379.10	
		04/10/07	432.70		34.14		398.56	0.00	398.56			
	(below D Clay)	07/10/07	432.70		33.62		399.08	0.00	399.08		432.70	No Lock.
P-107	EPA	01/09/07	431.92		33.10		398.82	0.00	398.82	42.08	389.84	
		04/10/07	431.92		30.05		401.87	0.00	401.87			
		07/10/07	431.92		29.54		402.38	0.00	402.38		431.92	Lock Rusted/Unlocked.
P-129	Main Sand	01/09/07	433.23								433.23	
		04/10/07										
											0.00	
P-130	Rand	01/09/07	431.59							42.08	389.51	
		04/10/07	431.59									
											0.00	
P-131	Rand	01/09/07	432.65		21.10		411.55	0.00	411.55	27.02	405.63	
		04/10/07	432.65		13.77		418.88	0.00	418.88			
		07/10/07	432.65		18.00		414.65	0.00	414.65		432.65	

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1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
P-132	EPA	01/09/07	432.12		32.79		399.33	0.00	399.33	36.55	395.57	
		04/10/07	432.12		29.40		402.72	0.00	402.72			
		07/10/07	432.12		29.59		402.53	0.00	402.53		432.12	
P-133	N. Olive	01/09/07	431.06		17.12		413.94	0.00	413.94	25.11	405.95	
		04/10/07	431.06		14.18		416.88	0.00	416.88			
		07/10/07	431.06		21.35		409.71	0.00	409.71		431.06	
P-134	N. Olive	01/09/07	432.55		19.92		412.63	0.00	412.63	24.20	408.35	
		04/10/07	432.55		13.86		418.69	0.00	418.69			
		07/10/07	432.55		17.54		415.01	0.00	415.01		432.55	
SP-1	Rand	01/09/07	429.01		11.54		417.47	0.00	417.47	26.85	402.16	
		04/10/07	429.01		9.04		419.97	0.00	419.97			
		07/10/07	429.01		13.37		415.64	0.00	415.64		429.01	
SP-2B	EPA	01/09/07	429.11		29.48		399.63	0.00	399.63	37.30	391.81	
		04/10/07	429.11		26.18		402.93	0.00	402.93			
		07/10/07	429.11		26.82		402.29	0.00	402.29		429.11	Troll Present.
SP-3	Rand	01/09/07	431.64		13.21		418.43	0.00	418.43	27.00	404.64	
		04/10/07	431.64		10.66		420.98	0.00	420.98			
		07/10/07	431.64		15.22		416.42	0.00	416.42		431.64	
SP-5	Rand	01/09/07	431.15		13.46		417.69	0.00	417.69		431.15	
		04/10/07	431.15		11.39		419.76	0.00	419.76			
		07/10/07	431.15		15.35		415.80	0.00	415.80		431.15	Troll Present.
SP-6	Rand	01/09/07	433.08		13.78		419.30	0.00	419.30	27.65	405.43	
		04/10/07	433.08		10.94		422.14	0.00	422.14			
		07/10/07	433.08		15.48		417.60	0.00	417.60		0.00	
SP-7	Rand	01/09/07	429.03		11.44		417.59	0.00	417.59	25.09	403.94	
		04/10/07	429.03		8.45		420.58	0.00	420.58			
		07/10/07	429.03		13.28		415.75	0.00	415.75		429.03	
SP-8	Rand	01/09/07	429.03		11.44		417.59	0.00	417.59		429.03	
		04/10/07	429.03		8		421.03	0.00	421.03			
		07/10/07	429.03		12.98		416.05	0.00	416.05		429.03	
SP-9	Rand	01/09/07	432.65		14.34		418.31	0.00	418.31	24.86	407.79	
		04/10/07	432.65		10.97		421.68	0.00	421.68			
		07/10/07	432.65		15.34		417.31	0.00	417.31		432.65	Not Locked/Rusted.
SP-10	Rand	01/09/07	432.61		14.07		418.54	0.00	418.54	28.03	404.58	
		04/10/07	432.61		10.62		421.99	0.00	421.99			
		07/10/07	432.61		14.78		417.83	0.00	417.83			
SP-11	Rand	01/09/07	432.40		13.21		419.19	0.00	419.19	24.83	407.57	
		04/10/07	432.40		10.91		421.49	0.00	421.49			
		07/10/07	432.40		14.85		417.55	0.00	417.55		432.40	Troll Present.
SP-12	EPA/ D Clay/	01/09/07	432.35							49.30	383.05	Abandoned by Shell in 12/2005
		04/10/07	432.35									
	Main Sand											
SP-13	EPA/ D Clay/	01/09/07	432.48							49.00	383.48	Abandoned by Shell in 12/2005
		04/10/07	432.48									
	Main Sand											

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
SP-14	EPA/ D Clay/	01/09/07	428.92								428.92	Abandoned by Shell in 2006
		04/10/07	428.92									
	Main Sand										0.00	
SP-15	Rand	01/09/07	428.89		11.71		417.18	0.00	417.18	22.09	406.80	
		04/10/07	428.89		8.43		420.46	0.00	420.46			
		07/10/07	428.89		14.03		414.86	0.00	414.86			
SP-16	Rand	01/09/07	429.43		11.98		417.45	0.00	417.45	28.21	401.22	
		04/10/07	429.43		9.37		420.06	0.00	420.06			
		07/10/07	429.43		14.38		415.05	0.00	415.05		429.43	
SP-17	Rand	01/09/07	428.19								428.19	Abandoned by Shell in 2006
		04/10/07	428.19									
SP-18	EPA/ D Clay/	01/09/07	431.07								431.07	Abandoned by Shell in 2006
		04/10/07	431.07									
	Main Sand										0.00	
SP-19	Rand	01/09/07	430.87		15.17		415.70	0.00	415.70	23.61	407.26	
		04/10/07	430.87		11.79		419.08	0.00	419.08			
		07/10/07	430.87		18.83		412.04	0.00	412.04		430.87	
SP-20	Rand	01/09/07	431.16		13.76		417.40	0.00	417.40	23.61	407.55	
		04/10/07	431.16		10.31		420.85	0.00	420.85			
		07/20/07	431.16		18.49		412.67	0.00	412.67		#VALUE!	
SP-21	Rand	01/09/07	431.68		16.15		415.53	0.00	415.53	24.30	407.38	
		04/10/07	431.68	12.97	12.98	418.71	418.70	0.01	418.71			
		07/10/07	431.68		20.68		411.00	0.00	411.00		431.68	Not Locked/Rusted.
SP-22	Rand	01/09/07	430.35		12.49		417.86	0.00	417.86	27.10	403.25	
		04/10/07	430.35									
		07/10/07	430.35		15.42		414.93	0.00	414.93		430.35	
SP-23	Rand	01/09/07	430.70		13.16		417.54	0.00	417.54	24.80	405.90	
		04/10/07	430.70		10.21		420.49	0.00	420.49			
		07/10/07	430.70		16.59		414.11	0.00	414.11		430.70	
SP-24	Rand	01/09/07	429.89		11.28		418.61	0.00	418.61	25.52	404.37	
		04/10/07	429.89		8.25		421.64	0.00	421.64			
		07/10/07	428.89		13.04		415.85	0.00	415.85		428.89	
SP-25	Rand	01/09/07	428.61	11.07	11.11	417.54	417.50	0.04	417.53	21.56	407.05	
		04/10/07	428.61		8.17		420.44	0.00	420.44			
		07/10/07	428.61	13.05	13.06		415.55	0.01	415.56		428.61	No well cap. Confirmed by evidence on probe.
SP-26	Rand	01/09/07	429.88		12.38		417.50	0.00	417.50	25.94	403.94	
		04/10/07	429.88		9.39		420.49	0.00	420.49			
		07/10/07	429.88		14.22		415.66	0.00	415.66		429.88	
SP-27	Rand	01/09/07	431.93		14.58		417.35	0.00	417.35	18.30	413.63	
		04/10/07	431.93		12.11		419.82	0.00	419.82			
		07/10/07	431.93								431.93	Could not get probe to water due to obstruction in well.

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	Comments
SP-28	Rand	01/09/07	432.21		13.81		418.40	0.00	418.40	29.80	**402.41**	
		04/10/07	432.21		11.50		420.71	0.00	420.71			
		07/10/07	432.21		15.83		416.38	0.00	416.38		**432.21**	
SP-29	Rand	01/09/07	431.81		14.18		417.63	0.00	417.63	29.80	**402.01**	
		04/10/07	431.81		10.87		420.94	0.00	420.94			
		07/10/07	431.81		15.78		416.03	0.00	416.03		**431.81**	Odor
SP-30	Rand	01/09/07	431.87	15.45	15.51	416.42	416.36	0.06	416.40	30.34	**401.53**	
		04/10/07	431.87	13.13	13.21	418.74	418.66	0.08	418.72			
		07/10/07	431.87	17.62	17.63	414.25	414.24	0.01	414.25			Product confirmed by evidence on probe.
SP-31	Rand	01/09/07	429.77		12.84		416.93	0.00	416.93	26.17	**403.60**	
		04/10/07	429.77		9.25		420.52	0.00	420.52			
		07/10/07	429.77		14.81		414.96	0.00	414.96		**429.77**	
SP-32	Rand	01/09/07	430.49		13.35		417.14	0.00	417.14	26.34	**404.15**	
		04/10/07	430.49		10.07		420.42	0.00	420.42			
		07/10/07	430.49		15.64		414.85	0.00	414.85		**430.49**	
SP-33	Rand	01/09/07	430.99		13.74		417.25	0.00	417.25	29.96	**401.03**	
		04/10/07	430.99		11.14		419.85	0.00	419.85			
		07/10/07	430.99		16.00		414.99	0.00	414.99		**430.99**	
SP-34	Rand	01/09/07	430.17		13.54		416.63	0.00	416.63	29.11	**401.06**	
		04/10/07	430.17									
		07/10/07	430.17		15.66		414.51	0.00	414.51		**430.17**	
SP-35	Rand	01/09/07	431.13		13.59		417.54	0.00	417.54	27.95	**403.18**	
		04/10/07	431.13		10.65		420.48	0.00	420.48			
		07/10/07	431.13		15.46		415.67	0.00	415.67		**431.13**	Odor
SP-36	Main Sand	01/09/07	429.50		34.10		395.40	0.00	395.40	50.67	**378.83**	
		04/10/07	429.50		31.59		397.91	0.00	397.91			
	(below D Clay)	07/10/07	429.50		31.03		398.47	0.00	398.47		**429.50**	
SP-37	EPA	01/09/07	429.71		29.66		400.05	0.00	400.05	32.06	**397.65**	
		04/10/07	429.71		24.85		404.86	0.00	404.86			
		07/10/07	429.71		27.79		401.92	0.00	401.92		**429.71**	Troll Present
SP-38	Rand	01/09/07	430.90		22.39		408.51	0.00	408.51	20.41	**410.49**	
		04/10/07	430.90		17.88		413.02	0.00	413.02			
		07/10/07	430.90		22.85		408.05	0.00	408.05		**430.90**	
SP-39	Rand	01/09/07	431.98		15.57		416.41	0.00	416.41	24.05	**407.93**	
		04/10/07	431.98		12.16		419.82	0.00	419.82			
		07/10/07	431.98		19.33		412.65	0.00	412.65		**431.98**	
SP-40	EPA	01/09/07	431.84		31.77		400.07	0.00	400.07	37.38	**394.46**	
		04/10/07	431.84		28.43		403.41	0.00	403.41			
		07/10/07	431.84		29.55		402.29	0.00	402.29		**431.84**	
SP-41	Main Sand	01/09/07	431.52		36.20		395.32	0.00	395.32	55.20	**376.32**	
		04/10/07	431.52		32.99		398.53	0.00	398.53			
	(below D Clay)	07/10/07	431.52		32.98		398.54	0.00	398.54		**431.52**	

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WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
SP-42	Main Sand	01/09/07	431.73		36.19		395.54	0.00	395.54	50.00	381.73	
		04/10/07	431.73		32.66		399.07	0.00	399.07			
	(below D Clay)	07/10/07	431.73		32.85		398.88	0.00	398.88		431.73	Surface Concrete Broken
SP-43	EPA	01/09/07	431.75		29.12		402.63	0.00	402.63	35.70	396.05	
		04/10/07	431.75		26.16		405.59	0.00	405.59			
		07/10/07	431.75		28.68		403.07	0.00	403.07		431.75	Troll Present. Surface concrete broken
SP-44	Rand	01/09/07	431.87		18.10		413.77	0.00	413.77	18.10	413.77	
		04/10/07	431.87		16.60		415.27	0.00	415.27			
		07/10/07	431.87		18.79		413.08	0.00	413.08		431.87	Odor
SP-45	EPA	01/09/07	434.16		34.56		399.60	0.00	399.60		434.16	
		04/10/07	434.16		31.43		402.73	0.00	402.73			
		07/10/07	434.16		31.81		402.35	0.00	402.35		434.16	
SP-46	Main Sand	01/09/07	434.06		38.56		395.50	0.00	395.50		434.06	
		04/10/07	434.06		35.49		398.57	0.00	398.57			
	(below D Clay)	07/10/07	434.06		35.27		398.79	0.00	398.79		434.06	Troll Present
SP-47	EPA	01/09/07	432.96		33.41		399.55	0.00	399.55		432.96	
		04/10/07	432.96		30.22		402.74	0.00	402.74			
		07/10/07	432.96		30.53		402.43	0.00	402.43		432.96	
SP-48	NA	01/09/07	432.31		33.71		398.60	0.00	398.60		432.31	
		04/10/07	432.31		31.13		401.18	0.00	401.18			
		07/10/07	432.31		31.38		400.93	0.00	400.93			
SP-49	NA	01/09/07	428.85		30.06		398.79	0.00	398.79		428.85	
		04/10/07	428.85		26.88		401.97	0.00	401.97			
		07/10/07	428.85		27.91		400.94	0.00	400.94			Troll Present
SP-50	EPA	01/09/07	432.47		33.12		399.35	0.00	399.35		432.47	
		04/10/07	432.47		29.90		402.57	0.00	402.57			
		07/10/07	432.47		30.63		401.84	0.00	401.84			Pressure/Odor
SP-51	Main Sand	01/09/07	432.49		37.09		395.40	0.00	395.40		432.49	
		04/10/07	432.49		34.04		398.45	0.00	398.45			
		07/10/07	432.49		33.81		398.68	0.00	398.68			
SP-52	NA	01/09/07	428.99		13.92		415.07	0.00	415.07		428.99	
		04/10/07	428.99									
		07/10/07	428.99		16.43		412.56	0.00	412.56			
SP-53	NA	01/09/07	428.92		24.39		404.53	0.00	404.53		428.92	
		04/10/07	428.92									
		07/10/07	428.92		23.99		404.93	0.00	404.93			Odor
SP-54	NA	01/09/07	428.90		33.43		395.47	0.00	395.47		428.90	
		04/10/07	428.90									
		07/10/07	428.90		30.14		398.76	0.00	398.76			
SP-55	NA	01/09/07	432.31		14.13		418.18	0.00	418.18		432.31	
		04/10/07	432.31									
		07/10/07	432.31		16.51		415.80	0.00	415.80			
SP-56	NA	01/09/07	432.21		32.33		399.88	0.00	399.88		432.21	
		04/10/07	432.21									
		07/10/07	432.21		29.84		402.37	0.00	402.37			

TABLE 3
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells (Shell Sites) Outside of Hartford, Illinois

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

WELL	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing-Total Well Depth)	Comments
SP-57	NA	01/09/07	432.15		36.61		395.54	0.00	395.54		432.15	
		04/10/07	432.15									
		07/10/07	432.15		33.36		398.79	0.00	398.79			
SP-58	NA	01/09/07	431.93		32.72		399.21	0.00	399.21		431.93	
		04/10/07	431.93		29.59		402.34	0.00	402.34			
		07/10/07	431.93		30.33		401.60	0.00	401.60			Pressure/Odor
SP-59	NA	01/09/07	431.94		36.70		395.24	0.00	395.24		431.94	
		04/10/07	431.94	33.81	33.82	398.13	398.12	0.01	398.13			
		07/10/07	431.94		33.52		398.42	0.00	398.42			
SP-60	NA	01/09/07	432.05		36.76		395.29	0.00	395.29		432.05	
		04/10/07	432.05		34.01		398.04	0.00	398.04			
		07/10/07	432.05		33.60		398.45	0.00	398.45			
TP-PZ-1 (E)	EPA	01/09/07	437.36		38.08		399.28	0.00	399.28		437.36	
		04/10/07	437.36		34.74		402.62	0.00	402.62			
		07/10/07	437.36		34.66		402.70	0.00	402.70		437.36	
TP-PZ-2-(E)	EPA	01/09/07	434.43		34.95		399.48	0.00	399.48		434.43	
		04/10/07	434.43		31.73		402.70	0.00	402.70			
		07/10/07	434.43		31.88		402.55	0.00	402.55		434.43	

NOTES:
NA = Not Applicable
= No data
SG = Specific gravity of hydrocarbon assumed to be 0.74 by others
1 = Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]
Well SP-4 no longer exists
TOC elevations (except for SP-42, SP-43, & SP-44) have been rotated and adjusted to match USGS datum (datum used to survey Village wells)
This rotation and adjustment of original survey data (obtained in 7/01 by CMT, Inc.) was completed in 1/04 by CMT. TOC elevations for SP-42, SP-43, and SP-44 were surveyed to USGS datum in 12/03 by CMT.
Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed
Total Well Depth from January 2006 unless otherwise indicated

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group / Hartford, Illinois

Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
DS-1	Main Sand (Shallow)	01/09/07	430.94	34.18	34.30	396.76	396.64	0.12	396.73	34.95	395.99	
		04/11/07	430.94	33.30	33.75	397.64	397.19	0.45	397.54			
		07/11/07	430.94	32.32	32.69	398.62	398.25	0.37	398.54	34.60		
DS-2	Main Sand (Shallow)	01/09/07	431.13	34.19	34.43	396.94	396.70	0.24	396.89	34.65	396.48	
		04/11/07	431.13	33.36	33.98	397.77	397.15	0.62	397.63			
		07/10/07	431.13	32.31	32.50	398.82	398.63	0.19	398.78	34.83		
DS-3	Main Sand (Shallow)	01/09/07	430.49	33.58	34.18	396.91	396.31	0.60	396.78	34.35	396.14	
		04/11/07	430.49	32.76	33.07	397.73	397.42	0.31	397.66			
		07/10/07	430.49							34.50		Dry
DS-4	Main Sand (Shallow)	01/09/07	431.26	34.68	34.78	396.58	396.48	0.10	396.56	34.82	396.44	
		04/11/07	431.26	33.86	34.08	397.40	397.18	0.22	397.35			
		07/10/07	431.26	32.74	32.81	398.52	398.45	0.07	398.50	34.95		
GB-1	Main Sand (Shallow)	01/09/07	431.59		32.05		399.54	0.00	399.54	42.04	389.55	
		04/11/07	431.59		31.58		400.01	0.00	400.01			
		07/11/07	431.59		31.20		400.39	0.00	400.39	41.85		
GB-6	Main Sand (Shallow)	01/09/07	430.53		32.63		397.90	0.00	397.90	43.42	387.11	TD= January 2006
		04/11/07	430.53		32.20		398.33	0.00	398.33			
		07/11/07	430.53		31.90		398.63	0.00	398.63	43.31		
LP-4	Main Sand (Shallow)	01/09/07	432.55		34.87		397.68	0.00	397.68	42.21	390.34	
		04/11/07	432.55		34.14		398.41	0.00	398.41			
		07/11/07	432.55		33.29		399.26	0.00	399.26	42.10		
MP-1S	N. Olive	01/09/07	431.37								431.37	
		04/10/07	431.37									
		07/10/07	431.37									
MP-1D	EPA	01/09/07	431.04								431.04	
		04/10/07	431.04									
		07/10/07	431.04									
MP-2S	N. Olive	01/09/07	430.66		26.85		403.81	0.00	403.81	27.22	403.44	
		04/10/07	430.66									
		07/10/07	430.66									
MP-2D	EPA	01/09/07	430.27							33.65	396.62	DRY, TD= January 2007
		04/10/07	430.27									
		07/10/07	430.27									
MP-3S	N. Olive	01/09/07	430.59							27.01	403.58	
		04/10/07	430.59									
		07/10/07	430.59									
MP-3D	EPA	01/09/07	430.51							33.60	396.91	
		04/10/07	430.51									
		07/10/07	430.51									
MP-4S	N. Olive	01/09/07	430.42		25.51		404.91	0.00	404.91	26.53	403.89	TD= January 2006
		04/10/07	430.42									
		07/10/07	430.42									
MP-4D	EPA	01/09/07	430.42							33.87	396.55	DRY, TD= January 2007
		04/10/07	430.42	31.59		398.83		2.29		33.88		
		07/10/07	430.42	30.88	33.52	399.54	396.90	2.97		33.85		

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group / Hartford, Illinois

Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
MW-1	Main Sand (Shallow)	01/09/07	420.39		18.18		402.21	0.00	402.21	27.06	393.33	
		04/11/07	420.39		9.67		410.72	0.00	410.72			
		07/11/07	420.39		16.53		403.86	0.00	403.86	27.10		
MW-2	Main Sand (Shallow)	01/09/07	419.10		17.61		401.49	0.00	401.49	25.59	393.51	
		04/11/07	419.10		9.03		410.07	0.00	410.07			
		07/11/07	419.10		16.05		403.05	0.00	403.05	24.98		
MW-3	Main Sand (Shallow)	01/09/07	421.37		20.10		401.27	0.00	401.27	26.11	395.26	
		04/11/07	421.37		11.37		410.00	0.00	410.00			
		07/11/07	421.37		18.30		403.07	0.00	403.07	26.65		
MW-4	Main Sand (Shallow)	01/09/07	421.38		20.40		400.98	0.00	400.98	27.95	393.43	
		04/11/07	421.38		11.77		409.61	0.00	409.61			
		07/11/07	421.38		18.21		403.17	0.00	403.17	27.99		
P-6 N	Main Sand (Basal)	01/09/07	430.29		34.94		395.35	0.00	395.35	100.00	330.29	
		04/10/07	430.29		32.43		397.86	0.00	397.86			
		07/10/07	430.29		31.64		398.65	0.00	398.65	102.00		(T 2/27/05)
P-6 S	Main Sand (Basal)	01/09/07	430.28		34.95		395.33	0.00	395.33	95.10	335.18	
		04/10/07	430.28		32.44		397.84	0.00	397.84			
		07/10/07	430.28		31.63		398.65	0.00	398.65	96.13		
P-6 E	Main Sand (Basal)	01/09/07	429.73	34.06	35.76	395.67	393.97	1.70	395.30	91.80	337.93	
		04/10/07	429.73	33.50	35.17	396.23	394.56	1.67	395.86			
		07/10/07	429.73	30.86	32.49	398.87	397.24	1.63	398.51	93.05		
Product Pipeline	NA	01/09/07	--		12.90			0.00		14.50	--	TD= January 2006
		04/10/07	--		12.58			0.00				
		07/10/07	--		12.45			0.00		14.20		Sump
RB-01	Main Sand (Shallow)	01/09/07	430.28							33.55	396.73	DRY, TD= January 2007
		04/10/07	430.28		32.79	430.28	397.49	0.00	397.49			
		07/10/07	430.28		31.04	430.28	399.24	0.00	399.24	33.55		
RB-08P	EPA / Main	01/09/07	433.41	34.66	37.49	398.75	395.92	2.83	398.13		433.41	
		04/10/07	433.41	32.18	36.72	401.23	396.69	4.54	400.23			Skimmer Well
		07/10/07	433.41	30.67	36.94	402.74	396.47	6.27	401.36	72.00		
RB-08	EPA / Main	01/09/07		23.79				5.77		29.56	-29.56	TD= January 2007
		04/10/07		22.54				7.00		29.54		2" piezometer
		07/10/07		21.36				8.23		29.59		
RB-10	EPA / Main	01/09/07	430.16	32.70	39.23	397.46	390.93	6.53	396.02	46.56	383.60	
		04/11/07	430.16		32.01		398.15	0.00	398.15			
		07/10/07	430.16	31.03	31.51	399.13	398.65	0.48	399.02	46.64		
RB-13	EPA / Main	01/09/07	430.79		33.84		396.95	0.00	396.95	45.03	385.76	
		04/10/07	430.79		32.38		398.41	0.00	398.41			
		07/10/07	430.79		30.08		400.71	0.00	400.71	45.09		
RB-22	Main Sand (Shallow)	01/10/07	431.06		32.85		398.21	0.00	398.21	32.83	398.23	
		04/11/07	431.06		32.13		398.93	0.00	398.93			
		07/10/07	431.06		30.33		400.73	0.00	400.73	32.78		
RB-25	EPA / Main	01/09/07	432.10		35.93		396.17	0.00	396.17	47.38	384.72	
		04/10/07	432.10		33.91		398.19	0.00	398.19			
		07/10/07	432.10		33.41		398.69	0.00	398.69	47.60		

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group / Hartford, Illinois

Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RB-26	EPA / Main	01/09/07	430.05		34.10		395.95	0.00	395.95	49.27	380.78	
		04/10/07	430.05		31.82		398.23	0.00	398.23			
		07/10/07	430.05		30.50		399.55	0.00	399.55	49.25		
RB-29	N. Olive	01/09/07	431.97	14.20	14.51	417.77	417.46	0.31	417.70	21.87	410.10	
		04/11/07	431.97	12.82	12.98	419.15	418.99	0.16	419.11			
		07/10/07	431.97	13.65	13.84	418.32	418.13	0.19	418.28	21.97		
RB-30	Main Sand (Shallow)	01/09/07	431.94		35.39		396.55	0.00	396.55	46.23	385.71	
		04/11/07	431.94		33.78		398.16	0.00	398.16			
		07/10/07	431.94		32.87		399.07	0.00	399.07	46.22		
RB-35	EPA / Main	01/09/07	429.49	32.18	35.56	397.31	393.93	3.38	396.57	44.85	384.64	TD= January 2006
		04/10/07	429.49	30.72	32.05	398.77	397.44	1.33	398.48			
		07/10/07	429.49	28.17	34.35	401.32	395.14	6.18	399.96	44.96		
RB-36	N. Olive	01/09/07	429.21		22.03		407.18	0.00	407.18	27.24	401.97	
		04/10/07	429.21		17.59		411.62	0.00	411.62			
		07/10/07	429.21		18.72		410.49	0.00	410.49	27.27		
RB-37	Main Sand (Shallow)	01/09/07	428.52							60.83	367.69	TD= January 2006, Skimmer Pump in Well
		04/10/07	428.52									Skimmer Pump in Well
		07/10/07	428.52	29.40	32.05	399.12	396.47	2.65	398.54	60.81		
RB-38	Main Sand (Shallow)	01/09/07	433.73		37.97		395.76	0.00	395.76	52.90	380.83	
		04/11/07	433.73		36.64		397.09	0.00	397.09	52.90		
		07/10/07	433.73		35.81		397.92	0.00	397.92	52.91		
RB-39	EPA / Main	01/09/07	431.54		32.97		398.57	0.00	398.57	45.30	386.24	TD= January 2006
		04/10/07	431.54		29.83		401.71	0.00	401.71			
		07/10/07	431.54		29.38		402.16	0.00	402.16	45.06		
RB-40	Main Sand (Shallow)	01/09/07	433.51		37.48		396.03	0.00	396.03		433.51	
		04/11/07	433.51		36.55		396.96	0.00	396.96			
		07/11/07	433.51		35.80		397.71	0.00	397.71	36.70		
RB-41	Main Sand (Shallow)	01/09/07	433.25		37.23		396.02	0.00	396.02	47.08	386.17	TD= January 2006
		04/11/07	433.25		36.63		396.62	0.00	396.62			
		07/11/07	433.25		36.00		397.25	0.00	397.25	46.94		
RB-42	Main Sand (Shallow)	01/09/07	428.47		32.83		395.64	0.00	395.64	44.56	383.91	TD= January 2006
		04/11/07	428.47		31.35		397.12	0.00	397.12			
		07/11/07	428.47		31.00		397.47	0.00	397.47	44.75		
RB-43	Main Sand (Shallow)	01/09/07	427.99		26.41		401.58	0.00	401.58	36.85	391.14	TD= January 2006
		04/11/07	427.99		28.10		399.89	0.00	399.89			
		07/11/07	427.99		27.80		400.19	0.00	400.19	36.71		
RB-44	Main Sand (Shallow)	01/09/07	432.99		34.05		398.94	0.00	398.94	41.21	391.78	TD= January 2006
		04/11/07	432.99		33.41		399.58	0.00	399.58			
		07/11/07	432.99		32.60		400.39	0.00	400.39	41.01		
RB-45	Main Sand (Shallow)	01/09/07	431.95		33.54		398.41	0.00	398.41	44.45	387.50	
		04/11/07	431.95		32.53		399.42	0.00	399.42			
		07/11/07	431.95		31.64		400.31	0.00	400.31	46.00		
RB-46	Main Sand (Shallow)	01/10/07	430.61		33.35		397.26	0.00	397.26	41.46	389.15	TD= January 2006
		04/11/07	430.61		31.58		399.03	0.00	399.03			
		07/10/07	430.61		30.15		400.46	0.00	400.46	40.98		

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RB-47	Main Sand (Shallow)	01/10/07	431.05		34.13		396.92	0.00	396.92	42.53	388.52	
		04/11/07	431.05		32.21		398.84	0.00	398.84			
		07/10/07	431.05		30.74		400.31	0.00	400.31	42.14		
RB-48	Main Sand (Shallow)	01/10/07	431.36							37.33	394.03	TD= January 2006, Skimmer Pump in Well
		04/11/07	431.36									Skimmer Pump in Well
		07/10/07	431.36	28.91	31.36	402.45	400.00	2.45	401.91	37.37		TD= 7/11/07
RB-49	A Clay	01/10/07	429.32		3.28		426.04	0.00	426.04	44.83	384.49	
		04/11/07	429.32		2.41		426.91	0.00	426.91			
		07/10/07	429.32		5.51		423.81	0.00	423.81	45.19		
RB-50	A Clay	01/10/07	431.47		5.29		426.18	0.00	426.18	42.98	388.49	TD= January 2006
		04/11/07	431.47		3.87		427.60	0.00	427.60			
		07/10/07	431.47		4.45		427.02	0.00	427.02	47.02		
RB-51	Main Sand (Shallow)	01/10/07	431.54		32.94		398.60	0.00	398.60	37.54	394.00	TD= January 2006
		04/11/07	431.54		30.09		401.45	0.00	401.45			
		07/10/07	431.54		29.05		402.49	0.00	402.49	42.91		TD= 7/11/07
RB-52	Main Sand (Shallow)	01/09/07	431.97							43.87	388.10	Skimmer Pump in Well
		04/10/07	431.97									Skimmer Pump in Well
		07/10/07	431.97	32.00	33.20	399.97	398.77	1.20	399.71	44.15		
RB-53	EPA / Main	01/09/07	433.31							44.65	388.66	TD= January 2006, Skimmer Pump in Well
		04/10/07	433.31							44.65		Barotroll, Skimmer Pump in Well
		07/10/07	433.31	33.80	38.06	399.51	395.25	4.26	398.57	44.47		
RB-54	EPA	01/09/07	431.79		24.20		407.59	0.00	407.59	41.34	390.45	
		04/10/07	431.79		21.59		410.20	0.00	410.20			
		07/11/07	431.79		21.70		410.09	0.00	410.09	40.44		
RB-55	EPA	01/09/07	433.82							41.13	392.69	TD= January 2006, Skimmer Pump in Well
		04/10/07	433.82									Skimmer Pump in Well
		07/10/07	433.82	31.97	37.51	401.85	396.31	5.54	400.63	41.32		
RB-56	EPA / Main	01/09/07	431.89							49.47	382.42	TD= January 2006, Skimmer Pump in Well
		04/10/07	431.89									Skimmer Pump in Well
		07/10/07	431.89	32.34	35.54	399.55	396.35	3.20	398.85	46.45		
RMP-5A	A Clay		431.08								431.08	
RMP-5B	N. Olive	01/09/07	430.96		18.00		412.96	0.00	412.96	18.08	412.88	
		04/10/07	430.96		18.02		412.94	0.00	412.94			
		07/10/07	430.96		18.02		412.94	0.00	412.94	18.10		
RMP-5C	EPA	01/09/07	431.24		36.41		394.83	0.00	394.83	41.39	389.85	
		04/10/07	431.24		33.67		397.57	0.00	397.57			
		07/10/07	431.24		32.45		398.79	0.00	398.79	41.40		
RMP-5D	Main Sand (below D Clay)	01/09/07	431.41		36.51		394.90	0.00	394.90	54.09	377.32	
		04/10/07	431.41		33.20		398.21	0.00	398.21			
		07/10/07	431.41		33.03		398.38	0.00	398.38	54.10		
RMP-6A	A Clay		430.08								430.08	

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RMP-6B	N. Olive	01/09/07	429.97							17.13	412.84	DRY, TD= January 2007
		04/10/07	429.97							17.14		DRY
		07/10/07	429.97		16.76		413.21	0.00	413.21	17.13		
RMP-6C	EPA	01/09/07	429.88		34.08		395.80	0.00	395.80	36.63	393.25	
		04/10/07	429.88		32.36		397.52	0.00	397.52			
		07/10/07	429.88		30.31		399.57	0.00	399.57	36.63		
RMP-6D	Main Sand (below D Clay)	01/09/07	430.26		34.84		395.42	0.00	395.42	54.29	375.97	
		04/10/07	430.26		32.31		397.95	0.00	397.95			
		07/10/07	430.26		31.50		398.76	0.00	398.76	53.63		
RMP-7A	A Clay		430.50								430.50	
RMP-7B	N. Olive	01/09/07	430.58							17.69	412.89	DRY, TD= January 2007
		04/10/07	430.58							17.71		DRY
		07/10/07	430.58							17.69		
RMP-7C	EPA	01/09/07	430.49	34.75	36.83	395.74	393.66	2.08	395.28	40.04	390.45	
		04/10/07	430.49		32.91		397.58	0.00	397.58			
		07/10/07	430.49		31.36		399.13	0.00	399.13	40.05		
RMP-7D	Main Sand (below D Clay)	01/09/07	430.56		35.24		395.32	0.00	395.32	52.82	377.74	
		04/10/07	430.56		32.65		397.91	0.00	397.91			
		07/10/07	430.56		31.85		398.71	0.00	398.71	52.88		
RMP-8A	A Clay		433.44								433 44	
RMP-8B	N. Olive	01/09/07	433.42							19.84	413.58	DRY, TD= January 2007
		04/10/07	433.42							19.85		DRY
		07/10/07	433.42							19.86		DRY
RMP-8C	EPA	01/09/07	433.37		37.00		396.37	0.00	396.37	42.23	391.14	
		04/10/07	433.37		35.90		397.47	0.00	397.47			
		07/10/07	433.37		33.27		400.10	0.00	400.10	42.25		
RMP-8D	Main Sand (below D Clay)	01/09/07	433.33		37.74		395.59	0.00	395.59	56.08	377.25	
		04/10/07	433.33		35.31		398.02	0.00	398.02			
		07/10/07	433.33		34.39		398.94	0.00	398.94	56.11		
RMP-9A	A Clay		434.15								434.15	
RMP-9B	N. Olive	01/09/07	433.95		20.87		413.08	0.00	413.08	20.89	413.06	
		04/10/07	433.95							20.92		DRY
		07/10/07	433.95							20.92		DRY
RMP-9C	Main Sand	01/09/07 ***	435.93							49.16	386.77	
		04/10/07	434.20	35.77	36.24	398.43	397.96	0.47	398.33			
		07/10/07	434.20	34.63	36.70	399.57	397.50	2.07	399.11	50.26		
RMP-10A	A Clay		430.70								430.70	
RMP-10B	N. Olive	01/09/07	430.70							17.85	412.85	DRY
		04/10/07	430.70		17.68		413.02	0.00	413.02			
		07/10/07	430 70							17.82		DRY
RMP-10C	Main Sand (Shallow)	01/09/07	430.74	34.51	36.31	396.23	394.43	1.80	395.83	45.03	385.71	
		04/10/07	430.74		32.29		398.45	0 00	398.45			
		07/10/07	430.74	31.46	31.55	399.28	399.19	0.09	399.26	45.00		
RMP-11A	A Clay		429.73								429.73	
RMP-11B	N. Olive	01/09/07	429.81							18.32	411.49	DRY
		04/10/07	429.81									DRY
		07/10/07	429.81							18.33		DRY

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RMP-11C	Main Sand (Shallow)	1/9/07 ***	432.30	36.19	38.23	396.11	394.07	2.04	395.66	44.02	388.28	
		04/01/07	429.82	31.30	31.71	398.52	398.11	0.41	398.43			
		07/10/07	429.82		30.62		399.20	0.00	399 20	43.97		
RMP-12A	A Clay		430.47								430.47	
RMP-12B	N. Olive	01/09/07	430.45		17.01		413.44	0.00	413.44	18.45	412.00	
		04/10/07	430.45									DRY
		07/10/07	430.45							18.47		DRY
RMP-12C	Main Silt		430.26								430.26	
RMP-12D	Main Sand	01/09/07	430.35		34.25		396.10	0.00	396.10	48.93	381.42	
		04/10/07	430.35		31.61		398.74	0.00	398.74			
		07/10/07	430.35		30.72		399.63	0.00	399.63			
RMP-13A	A Clay		431.28								431.28	
RMP-13B	Main Silt		431.30								431.30	
RMP-13C	Main Silt	01/09/07	431.32		33.78		397.54	0.00	397.54	40.00	391.32	
		04/10/07	431.32		32.66		398.66	0.00	398.66			
		07/10/07	431.32		31.00		400.32	0.00	400.32	41.11		
RMP-14A	A Clay		430.30								430.30	
RMP-14B	Main Silt		430.30								430.30	
RMP-14C	Main Sand (Shallow)	01/09/07	430.64	33.35	39.23	397.29	391.41	5.88	396.00	40.36	390.28	
		04/10/07	430.64	30.81	36.88	399.83	393.76	6.07	398.49			
		07/10/07	430.64	29.35	38.62	401.29	392.02	9.27	399.25	40.47		
RMP-15A	A Clay		433.63								433.63	
RMP-15B	N. Olive	01/09/07	433.77		20.78		412.99	0.00	412.99	20.86	412.91	
		04/10/07	433.77		20.80		412.97	0.00	412.97			
		07/10/07	433.77		20.81		412.96	0.00	412.96	20.90		
RMP-16A	A Clay		433.97								433.97	
RMP-16B	EPA	01/09/07	434.13		38.86		395.27	0.00	395.27	41.04	393.09	
		04/10/07	434.13		36.30		397.83	0.00	397.83			
		07/11/07	434.13	34.82	37.55	399.31	396.58	2.73	398.71	41.09		
RMP-17A	Main Sand (Shallow)	01/09/07	434.20	38.30	39.91	395.90	394.29	1.61	395.55	44.65	389.55	
		04/10/07	434.20	35.80	36.29	398.40	397.91	0.49	398.29			
		07/11/07	434.20	35.48	35.81	398.72	398.39	0.33	398.65	44.68		
RMP-18A	Main Sand (Shallow)	01/09/07	430.07	33.88	35.53	396.19	394.54	1.65	395.83	40.08	389.99	
		04/10/07	430.07	31.59	32.09	398.48	397.98	0.50	398.37			
		07/10/07	430.07	30.55	31.79	399.52	398.28	1.24	399.25	40.08		
RMP-19A	Main Sand (Shallow)	01/09/07	430.41	34.08	35.68	396.33	394.73	1.60	395.98	42 10	388.31	
		04/10/07	430.41	31.79	32.05	398.62	398.36	0.26	398.56			
		07/10/07	430.41	30.81	31.35	399.60	399.06	0.54	399.48	42.11		
RMW-1A	A Clay	01/09/07	429.78		10.09		419.69	0.00	419.69	10.34	419.44	
		04/10/07	429.78		10.09		419.69	0.00	419.69			
		07/10/07	429.78		10.12		419.66	0.00	419.66	10.30		
RMW-1B	Main Silt	01/09/07	429.72	26.11	26.20	403.61	403.52	0.09	403.59	26.68	403.04	TD= January 2006
		04/10/07	429.72		26.21		403.51	0.00	403.51			
		07/10/07	429.72		26.20		403.52	0.00	403.52	26.75		
RMW-1C	Main Sand (Shallow)	01/09/07	429.48	32.90	33.19	396.58	396.29	0.29	396.52	40.55	388.93	
		04/10/07	429.48	30.04	30.73	399.44	398.75	0.69	399.29			
		07/10/07	429.48	28.37	33.48	401.11	396.00	5.11	399.99	40.70		

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RMW-1D	Main Sand (Intermediate)	01/09/07	429.66		33.16		396.50	0.00	396.50	64.96	364.70	TD= January 2006
		04/10/07	429.66		30.38		399.28	0.00	399.28			
		07/11/07	429.66		29.83		399.83	0.00	399.83	64.85		
RMW-1E	Main Sand (Deep)	01/09/07	429.63		33.21		396.42	0.00	396.42	85.06	344.57	TD= January 2006
		04/10/07	429.63		30.42		399.21	0.00	399.21			
		07/11/07	429.63		29.52		400.11	0.00	400.11	84.86		
RMW-1F	Main Sand (Basal)	01/09/07	429.43		33.00		396.43	0.00	396.43	106.56	322.87	TD= January 2006
		04/10/07	429.43		30.21		399.22	0.00	399.22			
		07/11/07	429.43		29.35		400.08	0.00	400.08	106.41		
RMW-2A	N. Olive	01/09/07	433.64		21.89		411.75	0.00	411.75	22.01	411.63	
		04/10/07	433.64		21.90		411.74	0.00	411.74			
		07/10/07	433.64		21.87		411.77	0.00	411.77	22.01		
RMW-2B	B/C Clay (Permeable Lens)	01/09/07	433.64		26.84		406.80	0.00	406.80	27.55	406.09	
		04/10/07	433.64		26.10		407.54	0.00	407.54			
		07/10/07	433.64		25.84		407.80	0.00	407.80	27.55		
RMW-2C	Main Sand (Shallow)	01/09/07	433.34	37.05	38.41	396.29	394.93	1.36	395.99	50.37	382.97	
		04/10/07	433.34	34.60	35.17	398.74	398.17	0.57	398.61			
		07/10/07	433.34	33.64	35.59	399.70	397.75	1.95	399.27	50.41		
RMW-2D	Main Sand (Intermediate)	01/09/07	433.41		37.21		396.20	0.00	396.20	67.75	365.66	TD= January 2006
		04/10/07	433.41		34.62		398.79	0.00	398.79			
		07/10/07	433.41		33.80		399.61	0.00	399.61	67.70		
RMW-2E	Main Sand (Deep)	01/09/07	433.54		37.34		396.20	0.00	396.20	88.36	345.18	TD= January 2006
		04/10/07	433.54		34.78		398.76	0.00	398.76			
		07/10/07	433.54		33.95		399.59	0.00	399.59	88.31		
RMW-2F	Main Sand (Basal)	01/09/07	433.64		37.53		396.11	0.00	396.11	113.31	320.33	TD= January 2006
		04/10/07	433.64		34.89		398.75	0.00	398.75			
		07/10/07	433.64		34.03		399.61	0.00	399.61	113.18		
RMW-3A	N. Olive	01/09/07	434.10		22.25		411.85	0.00	411.85	22.54	411.56	
		04/10/07	434.10		22.30		411.80	0.00	411.80			
		07/10/07	434.10		22.29		411.81	0.00	411.81	22.56		
RMW-3B	EPA / Main	01/09/07	434.01	38.52	39.61	395.49	394.40	1.09	395.25	47.35	386.66	
		04/10/07	434.01	35.71	35.87	398.30	398.14	0.16	398.26			
		07/10/07	434.01	34.74	37.21	399.27	396.80	2.47	398.73	47.35		
RMW-3C	Main Sand (below D Clay)	01/09/07	434.21		38.83		395.38	0.00	395.38	54.15	380.06	
		04/10/07	434.21		35.79		398.42	0.00	398.42			
		07/10/07	434.21		34.44		399.77	0.00	399.77	54.18		
RMW-4A	N. Olive	01/09/07	433.02		20.09		412.93	0.00	412.93	21.53	411.49	
		04/10/07	433.02		19.63		413.39	0.00	413.39			
		07/10/07	433.02		18.08		414.94	0.00	414.94	21.56		
RMW-4B	EPA	01/09/07	433.07		35.03		398.04	0.00	398.04	44.56	388.51	
		04/10/07	433.07		33.08		399.99	0.00	399.99			
		07/10/07	433.07		32.10		400.97	0.00	400.97	44.59		
RMW-4C	Main Sand (below D Clay)	01/09/07	433.11		37.53		395.58	0.00	395.58	57.27	375.84	
		04/10/07	433.11		35.38		397.73	0.00	397.73			
		07/10/07	433.11		34.35		398.76	0.00	398.76	57.30		TD= 7/11/07
RMW-4D	Main Sand (Intermediate)	01/09/07	432.83		37.29		395.54	0.00	395.54	75.64	357.19	TD= January 2006
		04/10/07	432.83		35.01		397.82	0.00	397.82			
		07/10/07	432.83		34.00		398.83	0.00	398.83	74.99		

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RMW-4E	Main Sand (Deep)	01/09/07	432.82		37.26		395.56	0.00	395.56	94.28	338.54	
		04/10/07	432.82		34.97		397.85	0.00	397.85			
		07/10/07	432.82		34.01		398.81	0.00	398.81	94.30		
RMW-4F	Main Sand (Basal)	01/09/07	432.37		36.80		395.57	0.00	395.57		432.37	
		04/10/07	432.37		34.51		397.86	0.00	397.86			
		07/10/07	432.37		33.64		398.73	0.00	398.73	113.30		
RMW-5A	N. Olive	01/09/07	431.85		21.25		410.60	0.00	410.60	21.67	410.18	
		04/10/07	431.85		19.15		412.70	0.00	412.70			
		07/10/07	431.85		21.25		410.60	0.00	410.60	21.68		
RMW-5B	EPA	01/09/07	431.78		33.22		398.56	0.00	398.56	45.30	386.48	
		04/10/07	431.78		30.10		401.68	0.00	401.68			
		07/10/07	431.78		29.50		402.28	0.00	402.28	44.98		(T 1/7/05)
RMW-5C	Main Sand (below D Clay)	01/09/07	431.78		36.15		395.63	0.00	395.63	56.96	374.82	
		04/10/07	431.78		33.84		397.94	0.00	397.94			
		07/10/07	431.78		33.04		398.74	0.00	398.74	56.73		(T 1/10/05)
RMW-6A	N. Olive	01/09/07	430.40		17.95		412.45	0.00	412.45	18.29	412.11	
		04/10/07	430.40		17.95		412.45	0.00	412.45			
		07/10/07	430.40		17.90		412.50	0.00	412.50	18.26		
RMW-6B	B/C Clay (Permeable Lens)	01/09/07	430.39		21.12		409.27	0.00	409.27	24.98	405.41	
		04/10/07	430.39		19.90		410.49	0.00	410.49			
		07/10/07	430.39		22.95		407.44	0.00	407.44	24.95		
RMW-6C	Main Silt	01/09/07	430.37		30.52		399.85	0.00	399.85	30.72	399.65	
		04/10/07	430.37		30.52		399.85	0.00	399.85			
		07/10/07	430.37		29.35		401.02	0.00	401.02	30.70		
RMW-6D	Main Sand (Shallow)	01/09/07	430.41		34.35		396.06	0.00	396.06	47.03	383.38	
		04/10/07	430.41		33.63		396.78	0.00	396.78			
		07/10/07	430.41		31.73		398.68	0.00	398.68	47.05		
RMW-6E	Main Sand (Intermediate)	01/09/07	430.02		34.41		395.61	0.00	395.61		430.02	
		04/10/07	430.02		32.52		397.50	0.00	397.50			
		07/10/07	430.02		31.56		398.46	0.00	398.46	68.66		
RMW-6F	Main Sand (Deep)	01/09/07	429.67		34.05		395.62	0.00	395.62		429.67	
		04/10/07	429.67		32.16		397.51	0.00	397.51			
		07/10/07	429.67		31.13		398.54	0.00	398.54	88.69		
RMW-6G	Main Sand (Basal)	01/09/07	430.01		34.40		395.61	0.00	395.61		430.01	
		04/10/07	430.01		32.51		397.50	0.00	397.50			
		07/10/07	430.01		31.47		398.54	0.00	398.54	118.33		
RMW-7A	N. Olive	01/09/07	429.00		19.04		409.96	0.00	409.96	22.46	406.54	
		04/10/07	429.00		16.95		412.05	0.00	412.05			
		07/10/07	429.00		18.08		410.92	0.00	410.92	22.44		
RMW-7B	B/C Clay (Permeable Lens)	01/09/07	429.11		21.45		407.66	0.00	407.66	29.20	399.91	
		04/10/07	429.11		17.92		411.19	0.00	411.19			
		07/10/07	429.11		19.32		409.79	0.00	409.79	29.15		
RMW-7C	Main Sand	01/09/07	429.34								429.34	Skimmer Pump in Well
		04/10/07	429.34									Skimmer Pump in Well
		07/10/07	429.34	30.22	33.32	399.12	396.02	3.10	398.44	46.90		
RMW-7D	Main Sand (Intermediate)	01/09/07	428.62		33.08		395.54	0.00	395.54	67.23	361.39	
		04/10/07	428.62		31.32		397.30	0.00	397.30			
		07/10/07	428.62		30.30		398.32	0.00	398.32	67.53		

TABLE 4
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Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-7E	Main Sand (Deep)	01/09/07	428.95		33.42		395.53	0.00	395.53	87.60	341.35	
		04/10/07	428.95		31.66		397.29	0.00	397.29			
		07/10/07	428.95		30.60		398.35	0.00	398.35	87.63		
RMW-7F	Main Sand (Basal)	01/09/07	429.20		33.61		395.59	0.00	395.59		429.20	
		04/10/07	429.20		31.86		397.34	0.00	397.34			
		07/10/07	429.20		30.80		398.40	0.00	398.40	117.07		
RMW-8A	Main Silt	01/09/07	432.52		33.60		398.92	0.00	398.92	33.66	398.86	
		04/11/07	432.52		33.55		398.97	0.00	398.97			
		07/10/07	432.52		33.59		398.93	0.00	398.93	33.65		
RMW-8B	Main Sand (Shallow)	01/09/07	432.49		36.73		395.76	0.00	395.76	48.21	384.28	
		04/11/07	432.49		35.20		397.29	0.00	397.29			
		07/10/07	432.49		34.36		398.13	0.00	398.13	48.22		
RMW-8C	Main Sand (Intermediate)	01/09/07	432.32		36.52		395.80	0.00	395.80		432.32	
		04/11/07	432.32		34.91		397.41	0.00	397.41			
		07/10/07	432.32		34.19		398.13	0.00	398.13	69.80		
RMW-8D	Main Sand (Deep)	01/09/07	432.43		36.62		395.81	0.00	395.81		432.43	
		04/11/07	432.43		35.03		397.40	0.00	397.40			
		07/10/07	432.43		34.31		398.12	0.00	398.12	89.27		
RMW-8E	Main Sand (Basal)	01/09/07	432.52		36.70		395.82	0.00	395.82		432.52	
		04/11/07	432.52		35.05		397.47	0.00	397.47			
		07/10/07	432.52		34.34		398.18	0.00	398.18	>100		
RMW-9A	N. Olive	01/09/07	430.71		11.24		419.47	0.00	419.47	25.50	405.21	TD= January 2006
		04/11/07	430.71		11.55		419.16	0.00	419.16			
		07/10/07	430.71		11.67		419.04	0.00	419.04	25.48		
RMW-9B	EPA	01/09/07	430.67	34.58	34.83	396.09	395.84	0.25	396.04	46.47	384.20	TD= January 2006
		04/11/07	430.67	32.52	34.72	398.15	395.95	2.20	397.67			
		07/10/07	430.67	31.79	33.50	398.88	397.17	1.71	398.50	46.41		TD= 7/11/07
RMW-10A	N. Olive	01/09/07	430.53	14.03	14.35	416.50	416.18	0.32	416.43	20.61	409.92	
		04/11/07	430.53	13.33	13.41	417.20	417.12	0.08	417.18			
		07/10/07	430.53	13.54	13.74	416.99	416.79	0.20	416.95	20.66		
RMW-10B	Main Sand (Shallow)	01/09/07	430.42		34.27		396.15	0.00	396.15	45.42	385.00	
		04/11/07	430.42		32.63		397.79	0.00	397.79			
		07/11/07	430.42		31.80		398.62	0.00	398.62	45.70		
RMW-10C	Main Sand (Intermediate)	01/09/07	428.09		31.83		396.26	0.00	396.26		428.09	
		04/11/07	428.09		30.21		397.88	0.00	397.88			
		07/11/07	428.09		29.48		398.61	0.00	398.61	65.74		
RMW-10D	Main Sand	01/09/07	428.00		31.73		396.27	0.00	396.27		428.00	
		04/11/07	428.00		30.10		397.90	0.00	397.90			
		07/11/07	428.00		29.39		398.61	0.00	398.61	80.55		
RMW-10E	Main Sand	01/09/07	427.87		31.56		396.31	0.00	396.31		427.87	
		04/11/07	427.87		29.94		397.93	0.00	397.93			
		07/11/07	427.87		29.21		398.66	0.00	398.66	108.21		
RMW-11A	N. Olive	01/09/07	429.70		15.46		414.24	0.00	414.24	20.39	409.31	
		04/11/07	429.70		14.94		414.76	0.00	414.76			
		07/10/07	429.70		15.36		414.34	0.00	414.34	20.44		(T 1/21/05)

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RMW-11B	B/C Clay (Permeable Lens)	01/09/07	429.88		23.49		406.39	0.00	406.39	27.09	402.79	
		04/11/07	429.88		22.80		407.08	0.00	407.08			
		07/10/07	429.88		23.14		406.74	0.00	406.74	27.11		(T 1/21/05)
RMW-11C	Main Sand (Shallow)	01/09/07	430.27	33.52	35.02	396.75	395.25	1.50	396.42	43.21	387.06	Measured from top of well head
		04/11/07	430.27	32.35	32.92	397.92	397.35	0.57	397.79			
		07/10/07	430.27	31.46	31.49	398.81	398.78	0.03	398.80	44.20		(T 1/21/05-8/19/05)
RMW-12A	N. Olive	01/09/07	432.43		14.70		417.73	0.00	417.73	25.64	406.79	
		04/11/07	432.43		13.62		418.81	0.00	418.81			
		07/10/07	432.43		14.66		417.77	0.00	417.77	25.54		
RMW-12B	B/C Clay (Permeable Lens)	01/09/07	432.57		30.35		402.22	0.00	402.22	30.76	401 81	
		04/11/07	432.57		30.18		402.39	0.00	402.39			
		07/10/07	432.57		29.24		403.33	0.00	403.33	30.75		
RMW-12C	Main Sand (Shallow)	01/09/07	432.25		35.52		396.73	0.00	396.73	47.10	385 15	
		04/11/07	432.25		34.05		398.20	0.00	398.20			
		07/10/07	432.25		33.14		399.11	0.00	399.11	47.11		
RMW-13A	N. Olive	01/09/07	429.26		10.16		419.10	0.00	419.10	23.65	405.61	
		04/11/07	429.26		9.58		419.68	0.00	419.68			
		07/11/07	429.26		9 74		419.52	0.00	419.52	23.65		
RMW-13B	B/C Clay (Permeable Lens)	01/09/07	429.25		23.35		405.90	0.00	405.90	27.50	401.75	
		04/11/07	429.25		22.62		406.63	0.00	406.63			
		07/11/07	429.25		21.87		407.38	0.00	407.38	27.49		
RMW-13C	Main Sand (Shallow)	01/09/07	429.06		32.50		396.56	0.00	396.56	48.41	380.65	
		04/11/07	429.06		30.92		398.14	0.00	398.14			
		07/11/07	429.06		30.05		399.01	0 00	399.01	48.47		
RMW-14A	N. Olive	01/09/07	433.12		22.15		410.97	0.00	410 97	22.64	410.48	
		04/11/07	433.12		21.26		411.86	0.00	411.86			
		07/10/07	433.12		21.91		411.21	0.00	411.21	22.65		
RMW-14B	B/C Clay (Permeable Lens)	01/09/07	433.14		22.28		410.86	0.00	410.86	33.16	399.98	
		04/11/07	433.14		21.22		411.92	0 00	411.92			
		07/10/07	433.14		21.92		411.22	0.00	411.22	33.12		
RMW-14C	Main Sand (below D Clay)	01/09/07	433.10		36.92		396.18	0.00	396 18	56.76	376.34	
		04/11/07	433.10		34.97		398.13	0.00	398.13			
		07/10/07	433.10		33.93		399.17	0.00	399.17	56.90		
RMW-15A	N. Olive	01/09/07	432.96	18 82	18.84	414.14	414.12	0.02	414.14	25.01	407.95	
		04/10/07	432.96		17.75		415 21	0.00	415.21			
		07/10/07	432.96		17.36		415.60	0 00	415.60	24.99		
RMW-15B	B/C Clay	01/09/07	432.96		19.00		413.96	0.00	413 96	31.11	401.85	
		04/10/07	432.96		17.97		414.99	0.00	414 99			
		07/10/07	432.96		17 52		415.44	0.00	415.44	31.11		
RMW-15C	EPA / Main	01/09/07	432.95								432.95	Skimmer Pump in Well
		04/10/07	432.95									Skimmer Pump in Well
		07/10/07	432.95	31.18	41.85	401.77	391.10	10 67	399.42	47.93		
RMW-15D	Main Sand (Intermediate)	01/09/07	432.77		37.32		395.45	0.00	395.45	73.43	359.34	TD= January 2006
		04/10/07	432.77		35.25		397.52	0.00	397.52			
		07/10/07	432 77		33.84		398.93	0.00	398 93	73.46		
RMW-15E	Main Sand (Deep)	01/09/07	432.80		37.34		395.46	0.00	395.46	94.50	338.30	TD= January 2006
		04/10/07	432.80		35.25		397.55	0 00	397 55			
		07/10/07	432.80		33.85		398.95	0.00	398 95	93.38		

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RMW-15F	Main Sand (Basal)	01/09/07	432.36		36.92		395.44	0.00	395.44	123.04	309.32	
		04/10/07	432.36		34.82		397.54	0.00	397.54			
		07/10/07	432.36		33.39		398.97	0.00	398.97	123.05		
RMW-16A	Main Silt	01/10/07	430.07		29.14		400.93	0.00	400.93	29.18	400.89	
		04/11/07	430.07							29.10		DRY
		07/10/07	430.07		28.68		401.39	0.00	401.39	29.19		
RMW-16B	Main Sand (Shallow)	01/10/07	430.12		33.11		397.01	0.00	397.01	37.52	392.60	TD= January 2006
		04/11/07	430.12		30.55		399.57	0.00	399.57			
		07/10/07	430.12		29.37		400.75	0.00	400.75	43.85		
RMW-16C	Main Sand (Intermediate)	01/10/07	430.15		33.31		396.84	0.00	396.84		430.15	
		04/11/07	430.15		30.54		399.61	0.00	399.61			
		07/10/07	430.15		29.57		400.58	0.00	400.58	66.60		
RMW-16D	Main Sand (Deep)	01/10/07	430.13		33.29		396.84	0.00	396.84		430.13	
		04/11/07	430.13		30.52		399.61	0.00	399.61			
		07/10/07	430.13		29.60		400.53	0.00	400.53	91.92		
RMW-16E	Main Sand (Basal)	01/10/07	430.12		33.25		396.87	0.00	396.87		430.12	
		04/11/07	430.12		30.50		399.62	0.00	399.62			
		07/10/07	430.12		29.60		400.52	0.00	400.52	>100		
RMW-17A	Main Silt	01/10/07	431.80							33.24	398.56	DRY, TD= January 2007
		04/11/07	431.80		32.29		399.51	0.00	399.51			
		07/10/07	431.80		30.57		401.23	0.00	401.23	33.27		
RMW-17B	Main Sand (Shallow)	01/10/07	431.79		34.43		397.36	0.00	397.36	42.10	389.69	TD= January 2006
		04/11/07	431.79		32.25		399.54	0.00	399.54			
		07/10/07	431.79		30.52		401.27	0.00	401.27	48.02		
RMW-17C	Main Sand (Intermediate)	01/10/07	431.51		34.19		397.32	0.00	397.32	68.36	363.15	TD= January 2006
		04/11/07	431.51		31.34		400.17	0.00	400.17			
		07/10/07	431.51		30.42		401.09	0.00	401.09	69.43		
RMW-17D	Main Sand (Deep)	01/10/07	431.56		34.18		397.38	0.00	397.38	93.59	337.97	TD= January 2006
		04/11/07	431.56		31.34		400.22	0.00	400.22			
		07/10/07	431.56		30.40		401.16	0.00	401.16	93.45		TD= 7/11/07
RMW-17E	Main Sand (Basal)	01/10/07	431.61		34.15		397.46	0.00	397.46	> 100		TD= January 2006
		04/11/07	431.61		31.26		400.35	0.00	400.35			
		07/10/07	431.61		30.29		401.32	0.00	401.32	>100		
RMW-18A	Main Silt	01/10/07	429.54		25.12		404.42	0.00	404.42	25.20	404.34	
		04/11/07	429.54		25.15		404.39	0.00	404.39			
		07/10/07	429.54		25.12		404.42	0.00	404.42	25.22		
RMW-18B	Main Sand (Shallow)	01/10/07	429.42		32.84		396.58	0.00	396.58	40.60	388.82	
		04/11/07	429.42		30.68		398.74	0.00	398.74			
		07/10/07	429.42		29.07		400.35	0.00	400.35	40.66		TD= 7/11/07
RMW-19A	Main Silt	01/10/07	431.33		32.63		398.70	0.00	398.70	32.83	398.50	
		04/11/07	431.33		31.73		399.60	0.00	399.60			
		07/10/07	431.33		30.10		401.23	0.00	401.23	32 94		
RMW-19B	Main Sand (Shallow)	01/10/07	431.71		33.71		398.00	0.00	398.00	47.02	384.69	
		04/11/07	431.71		31.80		399.91	0.00	399.91			
		07/10/07	431.71		30.31		401.40	0.00	401.40	46 96		
RMW-20A	Main Silt	01/10/07	431.56								431.56	Skimmer Pump in Well
		04/11/07	431.56									Skimmer Pump in Well
		07/10/07	431.56	29.57	32.03	401.99	399 53	2.46	401.45	32.96		

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RMW-20B	Main Sand (Shallow)	01/10/07	431.56							46.65	384.91	Skimmer Pump in Well
		04/11/07	431.56									Skimmer Pump in Well
		07/10/07	431.56	30.06	30.16	401.50	401.40	0.10	401.48	46.65		
RMW-21A	Main Silt	01/10/07	432.16		29.85		402.31	0.00	402.31	30.11	402.05	
		04/11/07	432.16		29.87		402.29	0.00	402.29			
		07/10/07	432.16	29.81	29.97	402.35	402.19	0.16	402.31	30.13		
RMW-21B	Main Sand (Shallow)	01/10/07	432.09	32.89	36.10	399.20	395.99	3.21	398.49	42.94	389.15	
		04/11/07	432.09	31.25	32.97	400.84	399.12	1.72	400.46			
		07/10/07	432.09	29.77	31.91	402.32	400.18	2.14	401.85	42.98		
RMW-21C	Main Sand (Intermediate)	01/10/07	429.05		30.65		398.40	0.00	398.40		429.05	
		04/11/07	429.05		28.61		400.44	0.00	400.44			
		07/10/07	429.05		27.29		401.76	0.00	401 76	65.55		
RMW-21D	Main Sand (Deep)	01/10/07	428.73		30.33		398.40	0.00	398.40		428 73	
		04/11/07	428.73		28.31		400.42	0.00	400.42			
		07/10/07	428.73		26.91		401.82	0.00	401.82	91.51		
RMW-21E	Main Sand (Basal)	01/10/07	428.30		29.89		398.41	0.00	398.41		428.30	
		04/11/07	428.30		27.84		400.46	0.00	400.46			
		07/10/07	428.30		26.50		401.80	0.00	401.80	> 100		
RMW-22A	Main Silt	01/10/07	430.84							29.00	401.84	DRY, TD= January 2007
		04/11/07	430.84							28.87		DRY
		07/10/07	430.84							28.55		DRY
RMW-22B	Main Sand (Shallow)	01/10/07	430.76		32.25		398.51	0.00	398.51	43.10	387.66	
		04/11/07	430.76		29.95		400.81	0.00	400.81			
		07/10/07	430.76		28.66		402.10	0.00	402.10	43.02		
RMW-23A	Main Sand (Shallow)	01/10/07	430.45	31.03	33.45	399.42	397.00	2.42	398.89	45.28	385.17	
		04/11/07	430.45	29.22	29.73	401.23	400.72	0.51	401.12			
		07/10/07	430.45	28.05	28.53	402.40	401.92	0.48	402.29	45.38		(T 1/7/05)
RMW-24A	N. Olive	01/09/07	433.30		22.44		410.86	0.00	410.86	22.48	410.82	
		04/10/07	433.30		22.47		410.83	0.00	410.83			
		07/10/07	433.30		22.47		410.83	0.00	410.83	22.51		
RMW-24B	B/C Clay (Permeable Lens)	01/09/07	433 28		29.06		404 22	0.00	404.22	29.55	403.73	
		04/10/07	433.28		29.03		404.25	0.00	404.25			
		07/10/07	433.28		28.95		404.33	0.00	404.33	29.57		
RMW-24C	EPA / Main	01/09/07	433.28	37.67	37.93	395.61	395.35	0.26	395.55	47.88	385.40	
		04/10/07	433.28		35.39		397.89	0.00	397.89			
		07/10/07	433.28	33.58	36.70	399.70	396.58	3.12	399.01	47.85		(T 11/19/04-5/19/05)
RMW-24D	Main Sand (below D Clay)	01/09/07	433.43		37.82		395 61	0.00	395.61	55.14	378.29	
		04/10/07	433.43		35.27		398.16	0.00	398.16			
		07/10/07	433.43		34.44		398.99	0.00	398 99	55.20		
RMW-25A	EPA	01/09/07	433.51		37.65		395.86	0.00	395.86	43.82	389.69	
		04/10/07	433.51		36.09		397.42	0.00	397.42			
		07/10/07	433.51		33.89		399.62	0.00	399.62	43.90		(T 2/27/05)
RMW-25B	Main Sand (below D Clay)	01/09/07	433.58	37.94	38.37	395.64	395.21	0.43	395.55	56.85	376 73	
		04/10/07	433.58	35.38	36.22	398.20	397.36	0.84	398.02			(T 11/19/04)
		07/10/07	433 58	34.58	35.37	399.00	398.21	0.79	398.83	56.89		
RMW-26A	N. Olive	01/09/07	432.69							21.94	410 75	DRY, TD= January 2007
		04/10/07	432.69							21.95		DRY
		07/10/07	432 69							21.92		DRY

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-26B	B/C Clay (Permeable Lens)	01/09/07	433.01							27.00	406.01	DRY, TD= January 2007
		04/10/07	433.01		24.34		408.67	0.00	408.67			
		07/10/07	433.01		23.56		409.45	0.00	409.45	27.00		
RMW-26C	EPA	01/09/07	432.79		36.72		396.07	0.00	396.07	40.93	391.86	
		04/10/07	432.79		34.32		398.47	0.00	398.47			
		07/10/07	432.79		32.84		399.95	0.00	399.95	40.94		(T 2/27/05)
RMW-26D	Main Sand (below D Clay)	01/09/07	432.43		36.88		395.55	0.00	395.55	56.34	376.09	
		04/10/07	432.43		34.41		398.02	0.00	398.02			
		07/10/07	432.43		33.62		398.81	0.00	398.81	56.38		(T 11/19/04)
RMW-27A	Main Silt	01/09/07	429.81		25.17		404.64	0.00	404.64	25.47	404.34	
		04/10/07	429.81		25.17		404.64	0.00	404.64			
		07/10/07	429.81		24.94		404.87	0.00	404.87	25.48		
RMW-27B	Main Sand (Shallow)	01/09/07	429.81		32.57		397.24	0.00	397.24	38.21	391.60	
		04/10/07	429.81		31.64		398.17	0.00	398.17			
		07/10/07	429.81		31.23		398.58	0.00	398.58	38.45		
RMW-28A	N. Olive	01/09/07	432.42		27.28		405.14	0.00	405.14	27.56	404.86	
		04/10/07	432.42		27.30		405.12	0.00	405.12			
		07/10/07	432.42		27.28		405.14	0.00	405.14	27.57		
RMW-28B	EPA	01/09/07	432.42								432.42	Skimmer Pump in Well
		04/10/07	432.42									Skimmer Pump in Well
		07/10/07	432.42	32.90	37.75	399.52	394.67	4.85	398.45	43.05		
RMW-28C	Main Sand (below D Clay)	01/09/07	432.54		37.27		395.27	0.00	395.27	54.92	377.62	
		04/10/07	432.54		35.02		397.52	0.00	397.52			
		07/10/07	432.54		34.78		397.76	0.00	397.76	54.94		(T 1/7/05)
RMW-29A	Main Silt	01/09/07	432.65		37.02		395.63	0.00	395.63	43.47	389.18	
		04/10/07	432.65		35.34		397.31	0.00	397.31			
		07/10/07	432.65		33.76		398.89	0.00	398.89	44.01		
RMW-30A	Main Silt	01/09/07	428.96		25.34		403.62	0.00	403.62	25.80	403.16	
		04/10/07	428.96		25.35		403.61	0.00	403.61			
		07/10/07	428.96		25.34		403.62	0.00	403.62	25.81		
RMW-30B	Main Sand (Shallow)	01/09/07	428.89		33.77		395.12	0.00	395.12	39.49	389.40	
		04/10/07	428.89		31.55		397.34	0.00	397.34			
		07/10/07	428.89		30.00		398.89	0.00	398.89	39.48		
RMW-31A	Main Silt	01/09/07	433.26							28.59	404.67	DRY
		04/10/07	433.26									DRY
		07/10/07	433.26							28.58		DRY
RMW-31B	Main Sand (Shallow)	01/09/07	433.35	38.20	42.55	395.15	390.80	4.35	394.19	43.31	390.04	TD= January 2006
		04/10/07	433.35	36.60	36.73	396.75	396.62	0.13	396.72			
		07/11/07	433.35	34.04	37.10	399.31	396.25	3.06	398.64	43.26		
RMW-31C	Main Sand (Intermediate)	01/09/07	433.05		38.66		394.39	0.00	394.39	73.07	359.98	
		04/10/07	433.05		36.30		396.75	0.00	396.75			
		07/10/07	433.05		34.04		399.01	0.00	399.01	73.15		
RMW-31D	Main Sand (Deep)	01/09/07	432.96		38.11		394.85	0.00	394.85	94.41	338.55	TD= January 2006
		04/10/07	432.96		36.17		396.79	0.00	396.79			
		07/10/07	432.96		33.95		399.01	0.00	399.01	94.32		
RMW-31E	Main Sand (Basal)	01/09/07	432.86		38.32		394.54	0.00	394.54	124.11	308.75	
		04/10/07	432.86		36.61		396.25	0.00	396.25			
		07/10/07	432.86		33.60		399.26	0.00	399.26	124.20		

TABLE 4
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1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-32A	Main Silt	01/09/07	429.52		21.68		407.84	0.00	407.84	21.96	407.56	
		04/10/07	429.52		21.68		407.84	0.00	407.84			
		07/11/07	429.52		21.66		407.86	0.00	407.86	21.97		
RMW-32B	Main Sand (Shallow)	01/09/07	429.37	34.12	37.02	395.25	392.35	2.90	394.61	37.25	392.12	
		04/10/07	429.37	32.43	35.10	396.94	394.27	2.67	396.35			
		07/10/07	429.37	29.69	33.72	399.68	395.65	4.03	398.79	37.46		
RMW-33A	N. Olive	01/09/07	434.59		22.93		411.66	0.00	411.66	23.15	411.44	
		04/10/07	434.59		21.88		412.71	0.00	412.71			
		07/10/07	434.59		22.92		411.67	0.00	411.67	23.17		
RMW-33B	B/C Clay (Permeable Lens)	01/09/07	434.51		24.33		410.18	0.00	410.18	30.50	404.01	
		04/10/07	434.51		23.25		411.26	0.00	411.26			
		07/10/07	434.51		23.51		411.00	0.00	411.00	30.51		
RMW-33C	EPA	01/09/07	434.59		39.01		395.58	0.00	395.58	43.58	391.01	
		04/10/07	434.59		37.10		397.49	0.00	397.49			
		07/10/07	434.59		35.29		399.30	0.00	399.30	43.58		
RMW-33D	Main Sand (below D Clay)	01/09/07	434.64		39.21		395.43	0.00	395.43	57.19	377.45	
		04/10/07	434.64		36.55		398.09	0.00	398.09			
		07/10/07	434.64		35.95		398.69	0.00	398.69	57.27	377.37	(T 2/27/05)
RMW-34A	N. Olive	01/09/07	432.24		18.22		414.02	0.00	414.02	21.06	411.18	
		04/10/07	432.24		15.56		416.68	0.00	416.68			
		07/10/07	432.24		16.71		415.53	0.00	415.53	21.05		Transducer
RMW-34B	EPA	01/09/07	431.81		35.59		396.22	0.00	396.22	42.55	389.26	
		04/10/07	431.81		33.84		397.97	0.00	397.97			(T 1/7/05)
		07/10/07	431.81		31.58		400.23	0.00	400.23	42.20		TD= 7/11/07
RMW-34C	Main Sand (below D Clay)	01/09/07	431.95		36.36		395.59	0.00	395.59	57.31	374.64	
		04/10/07	431.95		33.93		398.02	0.00	398.02			
		07/10/07	431.95		33.06		398.89	0.00	398.89	57.05		(T 1/7/05)
RMW-34D	Main Sand (Intermediate)	01/09/07	432.24		36.66		395.58	0.00	395.58		432.24	
		04/10/07	432.24		34.20		398.04	0.00	398.04			
		07/10/07	432.24		33.33		398.91	0.00	398.91	74.03		
RMW-34E	Main Sand (Deep)	01/09/07	432.13		36.53		395.60	0.00	395.60		432.13	
		04/10/07	432.13		34.09		398.04	0.00	398.04			
		07/10/07	432.13		33.21		398.92	0.00	398.92	93.54		
RMW-34F	Main Sand (Basal)	01/09/07	432.26		36.65		395.61	0.00	395.61		432.26	
		04/10/07	432.26		34.19		398.07	0.00	398.07			
		07/10/07	432.26		33.43		398.83	0.00	398.83	116.88		
RMW-35A	N. Olive	01/09/07	431.99		17.65		414.34	0.00	414.34	21.59	410.40	
		04/10/07	431.99		14.82		417.17	0.00	417.17			
		07/10/07	431.99		16.19		415.80	0.00	415.80	21.61		
RMW-35B	EPA	01/09/07	432.32		34.01		398.31	0.00	398.31	44.69	387.63	TD= January 2006
		04/10/07	432.32		31.02		401.30	0.00	401.30			
		07/10/07	432.32		30.35		401.97	0.00	401.97	44.71		
RMW-35C	Main Sand (below D Clay)	01/09/07	432.06		36.53		395.53	0.00	395.53	57.11	374.95	
		04/10/07	432.06		34.21		397.85	0.00	397.85			
		07/10/07	432.06		33.40		398.66	0.00	398.66	57.13		
RMW-35D	Main Sand (Intermediate)	01/09/07	431.70		36.11		395.59	0.00	395.59	77.57	354.13	
		04/10/07	431.70		33.74		397.96	0.00	397.96			
		07/10/07	431.70		33.02		398.68	0.00	398.68	77.50		

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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing Total Well Depth)	COMMENTS
RMW-35E	Main Sand (Deep)	01/09/07	431.82		36.23		395.59	0.00	395.59		431.82	
		04/10/07	431.82		33.86		397.96	0.00	397.96			
		07/10/07	431.82		33.01		398.81	0.00	398.81	97.80		
RMW-35F	Main Sand (Basal)	01/09/07	432.35		36.72		395.63	0.00	395.63		432.35	
		04/10/07	432.35		34.35		398.00	0.00	398.00			
		07/10/07	432.35		33.60		398.75	0.00	398.75	120.09		
RMW-36A	N. Olive	01/09/07	431.57		20.29		411.28	0.00	411.28	20.42	411.15	
		04/10/07	431.57		20.26		411.31	0.00	411.31			
		07/10/07	431.57		20.32		411.25	0.00	411.25	20.48		
RMW-36B	EPA	01/09/07	431.37		34.14		397.23	0.00	397.23	44.29	387.08	TD= January 2006
		04/10/07	431.37		31.96		399.41	0.00	399.41			
		07/10/07	431.37		31.00		400.37	0.00	400.37	44.17		
RMW-36C	Main Sand (below D Clay)	01/09/07	431.67		36.12		395.55	0.00	395.55	57.65	374.02	
		04/10/07	431.67		33.97		397.70	0.00	397.70			
		07/10/07	431.67		33.16		398.51	0.00	398.51	57.47		
RMW-36D	Main Sand (Intermediate)	01/09/07	431.12		35.54		395.58	0.00	395.58	73.26	357.86	
		04/10/07	431.12		33.43		397.69	0.00	397.69			
		07/10/07	431.12		32.61		398.51	0.00	398.51	73.10		
RMW-36E	Main Sand (Deep)	01/09/07	431.02		35.41		395.61	0.00	395.61	93.17	337.85	
		04/10/07	431.02		33.49		397.53	0.00	397.53			
		07/10/07	431.02		32.47		398.55	0.00	398.55	93.26		
RMW-36F	Main Sand (Basal)	01/09/07	431.19		35.58		395.61	0.00	395.61		431.19	
		04/10/07	431.19		33.45		397.74	0.00	397.74			
		07/10/07	431.19		32.64		398.55	0.00	398.55	112.55		
RMW-37A	Main Silt	01/09/07	431.40		19.23		412.17	0.00	412.17	30.35	401.05	
		04/10/07	431.40		24.35		407.05	0.00	407.05			
		07/10/07	431.40		24.84		406.56	0.00	406.56	28.26		
RMW-37B	Main Sand (Shallow)	01/09/07	431.50		35.79		395.71	0.00	395.71	45.05	386.45	TD= January 2006
		04/10/07	431.50		36.17		395.33	0.00	395.33			
		07/10/07	431.50		31.82		399.68	0.00	399.68	42.02		
RMW-38A	Main Sand (below D Clay)	01/09/07	433.00							77.20	355.80	TD= January 2006, Skimmer Pump in Well
		04/10/07	433.00									Skimmer Pump in Well
		07/10/07	433.00	31.87	46.30	401.13	386.70	14.43	397.96	74.56		(T 12/7/04-1/6/05)
RMW-39A	Main Silt	01/09/07	431.06		17.99		413.07	0.00	413.07	18.25	412.81	
		04/11/07	431.06		18.01		413.05	0.00	413.05			
		07/10/07	431.06		17.99		413.07	0.00	413.07	18.29		
RMW-39B	Main Silt	01/09/07	431.29		28.61		402.68	0.00	402.68	29.07	402.22	
		04/11/07	431.29					0.00				DRY
		07/10/07	431.29		28.68		402.61	0.00	402.61	29.25		
RMW-39C	Main Sand (Shallow)	01/09/07	431.27		34.98		396.29	0.00	396.29	42.91	388.36	
		04/11/07	431.27		33.78		397.49	0.00	397.49			
		07/10/07	431.27		32.82		398.45	0.00	398.45	43.01		
RMW-40	EPA	01/09/07	432.41		36.45		395.96	0.00	395.96	41.18	391.23	
		04/10/07	432.41		34.96		397.45	0.00	397.45			
		07/10/07	432.41		32.67		399.74	0.00	399.74	41.23		(T 2/27/05)

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1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-41A	Main Sand (Intermediate)	01/09/07	434.03		38.93		395.10	0.00	395.10	67.27	366.76	
		04/10/07	434.03		35.75		398.28	0.00	398.28			
		07/10/07	434.03		35.51		398.52	0.00	398.52	67.30		Transducer
RMW-41B	Main Sand (Deep)	01/09/07	433.97		38.78		395.19	0.00	395.19	85.28	348.69	
		04/10/07	433.97		35.69		398.28	0.00	398.28			
		07/10/07	433.97		35.34		398.63	0.00	398.63	88.49		
RMW-41C	Main Sand (Basal)	01/09/07	434.05		38.76		395.29	0.00	395.29	111.80	322.25	
		04/10/07	434.05		35.74		398.31	0.00	398.31			
		07/10/07	434.05		35.34		398.71	0.00	398.71	116.54		
RMW-42A	N. Olive	01/09/07	431.76							21.90	409.86	DRY
		04/10/07	431.76									DRY
		07/10/07	431.76		21.82		409.94	0.00	409.94	21.90		TD= 7/11/07
RMW-42B	EPA	01/09/07	432.01		36.13		395.88	0.00	395.88	42.96	389.05	
		04/10/07	432.01	31.42	31.75	400.59	400.26	0.33	400.52			
		07/10/07	432.01	32.23	35.71	399.78	396.30	3.48	399.01	42.92		
RMW-42C	Main Sand (below D Clay)	01/09/07	431.98		36.32		395.66	0.00	395.66	56.18	375.80	
		04/10/07	431.98		34.10		397.88	0.00	397.88			
		07/10/07	431.98		33.23		398.75	0.00	398.75	56.07		Transducer
RMW-43A	Main Sand (Intermediate)	01/10/07	433 74		35.13		398.61	0.00	398.61		433.74	
		04/11/07	433.74		32.03		401.71	0.00	401.71			
		07/10/07	433.74		31.25		402.49	0.00	402.49	69.25		
RMW-43B	Main Sand (Deep)	01/10/07	433.25		34.62		398.63	0.00	398.63		433.25	
		04/11/07	433.25		31.52		401.73	0.00	401.73			
		07/10/07	433.25		30.75		402.50	0.00	402 50	94.24		
RMW-43C	Main Sand (Basal)	01/10/07	432.67		34.05		398.62	0 00	398.62		432.67	
		04/11/07	432.67		30.95		401.72	0 00	401.72			
		07/10/07	432.67		30 17		402.50	0.00	402.50	> 100		
RMW-44A	Main Sand (Intermediate)	01/09/07	431.24		35.55		395.69	0.00	395.69		431.24	
		04/11/07	431.24		34.18		397.06	0.00	397.06			
		07/10/07	431.24		33.41		397.83	0.00	397.83	65.29		
RMW-44B	Main Sand (Deep)	01/09/07	431.16		35.49		395.67	0.00	395.67		431.16	
		04/11/07	431.16		34.10		397.06	0 00	397 06			
		07/10/07	431.16		33.33		397.83	0.00	397.83	84.91		
RMW-44C	Main Sand (Basal)	01/09/07	430.95		35.23		395.72	0.00	395.72		430 95	
		04/11/07	430 95		33.82		397.13	0.00	397.13			
		07/10/07	430.95		33.05		397.90	0.00	397.90	>100		
RMW-45A	N. Olive	01/09/07	430.84		16 88		413.96	0.00	413.96	16.98	413.86	
		04/10/07	430.84		16.90		413.94	0.00	413.94			
		07/11/07	430.84		16.90		413.94	0.00	413.94	17 01		
RMW-45B	Main Sand (Shallow)	01/09/07	430.80							44.97	385.83	Skimmer Pump in Well
		04/10/07	430.80									Skimmer Pump in Well
		07/10/07	430 80	31.28	32.45	399 52	398.35	1.17	399.26	44.90		TD= 7/11/07
RMW-45C	Main Sand (Shallow)	01/09/07	430.75		35.02		395.73	0.00	395.73	52.03	378 72	
		04/10/07	430.75		32.42		398.33	0.00	398.33			
		07/10/07	430.75		31.56		399.19	0.00	399.19	52.05		
RMW-46A	N. Olive	01/09/07	428.79							15.07	413.72	DRY
		04/10/07	428.79		14.76		414.03	0.00	414.03			
		07/10/07	428.79		14.73		414.06	0.00	414.06	15.09		

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-46B	EPA	01/09/07	429.07		33.06		396.01	0.00	396.01	38.92	390.15	
		04/10/07	429.07		31.78		397.29	0.00	397.29			
		07/10/07	429.07		29.36		399.71	0.00	399.71	38.89		
RMW-46C	Main Sand (below D Clay)	01/09/07	428.98		33.36		395.62	0.00	395.62	51.64	377.34	
		04/10/07	428.98		31.15		397.83	0.00	397.83			
		07/10/07	428.98		30.18		398.80	0.00	398.80	51.66		
RMW-47A	N. Olive	01/09/07	433.82		22.12		411.70	0.00	411.70	22.37	411.45	
		04/10/07	433.82		22.14		411.68	0.00	411 68			
		07/10/07	433.82		22.19		411.63	0.00	411.63	22.42		
RMW-47B	EPA	01/09/07	433.50	37.98	38.42	395.52	395.08	0.44	395.42	43.79	389.71	
		04/10/07	433.50		35.43		398.07	0.00	398.07			
		07/10/07	433.50	34.17	35.62	399.33	397.88	1.45	399.01	44.10		Transducer
RMW-47C	Main Sand (below D Clay)	01/09/07	433.48		38.01		395.47	0.00	395.47	55.25	378.23	
		04/10/07	433.48		34.93		398.55	0.00	398.55			
		07/10/07	433.48		34.62		398.86	0.00	398.86	55.28		
RMW-48A	N. Olive	01/09/07	433.82		17.56		416.26	0.00	416.26	17.82	416.00	
		04/10/07	433.82		17.58		416.24	0.00	416.24			
		07/10/07	433.82		17.59		416.23	0.00	416.23	17.84		
RMW-48B	Main Sand (Shallow)	01/09/07 ***	435.99							50.28	385.71	H2A Present
		04/10/07	434.16									Skimmer Pump in Well
		07/10/07	434.16	34.63	36.70	399.53	397.46	2.07	399.07	50.26		
RMW-49A	N. Olive	01/09/07	429.86		16 19		413.67	0.00	413.67	16.48	413 38	
		04/10/07	429.86		16.11		413.75	0.00	413.75			
		07/10/07	429.86		16.13		413.73	0 00	413.73	16.50		
RMW-49B	Main Sand (Shallow)	01/09/07 ***	433.58	37.49	39.19	396.09	394.39	1.70	395.72	46.97	0.00	Measured from top of well head
		04/10/07	429.96	31.42	31.89	398.54	398.07	0.47	398.44			
		07/10/07	429.96	30.47	31.79	399.49	398.17	1.32	399.20	47.02		
RMW-50A	Main Sand (Shallow)	01/10/07	431.82		34.28		397.54	0.00	397.54		431.82	
		04/11/07	431.82		32.03		399.79	0.00	399.79			
		07/10/07	431.82		30.44		401.38	0.00	401.38	44.65		
RMW-50B	Main Sand (Intermediate)	01/10/07	431.66		34.16		397.50	0.00	397.50		431.66	
		04/11/07	431.66		31.42		400.24	0.00	400.24			
		07/10/07	431.66		30.38		401.28	0.00	401.28	70.25		
RMW-50C	Main Sand (Deep)	01/10/07	431.64		34.13		397.51	0.00	397.51		431.64	
		04/11/07	431.64		31 40		400.24	0.00	400 24			
		07/10/07	431.64		30.34		401.30	0 00	401.30	95.81		
RMW-50D	Main Sand (Basal)	01/10/07	431.60		34.01		397.59	0.00	397.59		431.60	
		04/11/07	431.60		31.27		400.33	0.00	400.33			
		07/10/07	431.60		30.24		401.36	0.00	401.36	> 100		
RMW-51A	Main Sand (Shallow)	01/10/07	428.59		30.64		397.95	0.00	397.95		428.59	
		04/11/07	428.59		28.72		399 87	0.00	399.87			
		07/10/07	428.59		26.49		402 10	0.00	402.10	39.38		
RMW-51B	Main Sand (Intermediate)	01/10/07	428.42		30 33		398.09	0 00	398.09		428.42	
		04/11/07	428.42		27.31		401.11	0 00	401 11			
		07/10/07	428.42		26 45		401.97	0.00	401.97	59.58		

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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-51C	Main Sand (Deep)	01/10/07	428.70		30.61		398.09	0.00	398.09		428.70	
		04/11/07	428.70		27.58		401.12	0.00	401.12			
		07/10/07	428.70		26.73		401.97	0.00	401.97	91.73		
RMW-51D	Main Sand (Basal)	01/10/07	428.20		30.14		398.06	0.00	398.06		428.20	
		04/11/07	428.20		27.15		401.05	0.00	401.05			
		07/10/07	428.20		26.26		401.94	0.00	401.94	> 100		
RMW-52A	Main Sand (Shallow)	01/10/07	432.37		33.30		399.07	0.00	399.07		432.37	
		04/11/07	432.37		30.37		402 00	0.00	402.00			
		07/10/07	432.37		29.58		402.79	0.00	402.79	42.91		
RMW-52B	Main Sand (Intermediate)	01/10/07	432.30		33.24		399.06	0.00	399.06		432.30	
		04/11/07	432.30		30.08		402.22	0.00	402.22			
		07/10/07	432.30		29.40		402.90	0.00	402.90	75.50		
RMW-52C	Main Sand (Deep)	01/10/07	432.26		33.18		399.08	0.00	399.08		432.26	
		04/11/07	432.26		29.99		402.27	0.00	402.27			
		07/10/07	432.26		29.34		402.92	0.00	402.92	96.20		
RMW-52D	Main Sand (Basal)	01/10/07	432.21		33.12		399.09	0.00	399.09		432.21	
		04/11/07	432.21		29.93		402.28	0.00	402.28			
		07/10/07	432.21		29.28		402.93	0.00	402.93	> 100		
RMW-53A	Main Sand (Intermediate)	01/10/07	433.55		34.08		399.47	0.00	399.47		433.55	
		04/11/07	433.55		30.75		402.80	0.00	402.80			
		07/10/07	433.55		30.26		403.29	0.00	403.29	74.46		
RMW-53B	Main Sand (Deep)	01/10/07	433.46		33.96		399.50	0.00	399.50		433.46	
		04/11/07	433.46		30.64		402.82	0.00	402.82			
		07/10/07	433.46		30.16		403 30	0.00	403.30	94.35		
RMW-53C	Main Sand (Basal)	01/10/07	433.46		33.97		399.49	0.00	399.49		433.46	
		04/11/07	433.46		30.66		402.80	0.00	402.80			
		07/10/07	433.46		30.14		403.32	0.00	403.32	> 100		
RMW-54A	Main Sand (Intermediate)	01/10/07	431.80		32 28		399.52	0.00	399.52		431.80	
		04/11/07	431.80		29.31		402.49	0.00	402.49			
		07/10/07	431.80		28.58		403.22	0.00	403.22	69.48		
RMW-54B	Main Sand (Deep)	01/10/07	431.70		32.17		399.53	0.00	399.53		431.70	
		04/11/07	431.70		29.21		402.49	0.00	402.49			
		07/10/07	431.70		28.45		403.25	0.00	403.25	90 30		
RMW-54C	Main Sand (Basal)	01/10/07	431.59		32.06		399.53	0.00	399.53		431.59	
		04/11/07	431.59		29.10		402.49	0.00	402.49			
		07/10/07	431.59		28.36		403.23	0.00	403.23	> 100		
RMW-55A	Main Sand (Intermediate)	01/10/07	429 86		30.36		399.50	0.00	399.50		429.86	
		04/11/07	429.86		27.73		402.13	0.00	402.13			
		07/10/07	429.86		26.81		403 05	0.00	403.05	74.95		
RMW-55B	Main Sand (Deep)	01/10/07	429.99		30 48		399 51	0.00	399.51		429.99	
		04/11/07	429.99		27 85		402.14	0.00	402.14			
		07/10/07	429 99		26.91		403.08	0.00	403 08	92.20		
RMW-55C	Main Sand (Basal)	01/10/07	430.06		30.57		399.49	30.57	423.33		430.06	
		04/11/07	430.06		27.92		402.14	27.92	423.92			
		07/10/07	430.06		26.96		403.10	0.00	403.10	> 100		
RMW-56A	EPA	01/09/07	434.71	40.69	40.90	394.02	393.81	0.21	393.97	44.69	390.02	
		04/11/07	434.71	36.50	36.83	398.21	397.88	0.33	398.14			
		07/10/07	434.71	36.55	41.24	398.16	393.47	4.69	397.13	44.70		Transducer

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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-56B	Main Sand (below D Clay)	01/09/07	434.61		40.69		393.92	0.00	393.92	59.14	375.47	
		04/10/07	434.61		36.29		398.32	0.00	398.32			
		07/10/07	434.61		37.17		397.44	0.00	397.44	59.05		Transducer
RMW-57A	EPA	01/09/07 ***	436.03							43.68		H2A Present
		04/10/07	434.23	36.04	36.39	398.19	397.84	0.35	398.11			
		07/10/07	434.23	34.86	37.79	399.37	396.44	2.93	398.73	43.72		
RMW-57B	Main Sand (below D Clay)	01/09/07 ***	435.98							56.32		H2A Present
		04/10/07	434.19		35.78		398.41	0.00	398.41			
		07/10/07	434.19		35.36		398.83	0.00	398.83	56.33		
RMW-58A	EPA	01/09/07	430.93	33.17	35.85	397.76	395.08	2.68	397.17	40.68	390.25	
		04/10/07	430.93	31.75	35.01	399.18	395.92	3.26	398.46			
		07/10/07	430.93	29.14	34.52	401.79	396.41	5.38	400.61	40.70		
RMW-58B	Main Sand	01/09/07	430.98	35.17	35.54	395.81	395.44	0.37	395.73	54.03	376.95	
		04/10/07	430.98	33.16	33.51	397.82	397.47	0.35	397.74			
		07/10/07	430.98	32.10	32.45	398.88	398.53	0.35	398.80	54.05		
RMW-59A	EPA	01/09/07	430.83	33.10	35.79	397.73	395.04	2.69	397.14	39.87	390.96	
		04/10/07	430.83	31.63	35.03	399.20	395.80	3.40	398.45			
		07/10/07	430.83	29.04	34.45	401.79	396.38	5.41	400.60	39.88		
RMW-59B	Main Sand (below D Clay)	01/09/07	430.97		35.25		395.72	0.00	395.72	54.22	376.75	
		04/10/07	430.97		33.22		397.75	0.00	397.75			
		07/10/07	430.97		32.20		398.77	0.00	398.77	54.39		
RMW-60A	N. Olive	01/09/07	430.79		17.71		413.08	0.00	413.08	17.73	413.06	
		04/10/07	430.79		17.75		413.04	0.00	413.04			
		07/10/07	430.79		17.73		413.06	0.00	413.06	17.81		
RMW-60B	EPA	01/09/07	430.78	33.17	35.78	397.61	395.00	2.61	397.04	41.56	389.22	
		04/10/07	430.78	31.73	35.04	399.05	395.74	3.31	398.32			
		07/10/07	430.78	29.01	34.51	401.77	396.27	5.50	400.56	41.60		
RMW-60C	Main Sand (below D Clay)	01/09/07	430.78	33.85	39.67	396.93	391.11	5.82	395.65	54.20	376.58	
		04/10/07	430.78	31.62	38.48	399.16	392.30	6.86	397.65			
		07/10/07	430.78	30.59	37.37	400.19	393.41	6.78	398.70	54.28		
RMW-61A	EPA	01/09/07	429.91	32.60	34.72	397.31	395.19	2.12	396.84	43.23	386.68	
		04/10/07	429.91	31.59	32.54	398.32	397.37	0.95	398.11			
		07/10/07	429.91	28.11	33.20	401.80	396.71	5.09	400.68	43.34		
RMW-61B	Main Sand (below D Clay)	01/09/07	429.71		34.33		395.38	0.00	395.38	55.20	374.51	
		04/10/07	429.71		32.24		397.47	0.00	397.47			
		07/10/07	429.71		30.82		398.89	0.00	398.89	55.15		
RMW-62A	EPA	01/09/07	429.70	32.35	34.57	397.35	395.13	2.22	396.86	42.96	386.74	
		04/10/07	429.70	31.42	32.08	398.28	397.62	0.66	398.13			
		07/10/07	429.70	28.00	32.85	401.70	396.85	4.85	400.63	42.90		
RMW-62B	Main Sand (below D Clay)	01/09/07	429.52		34.09		395.43	0.00	395.43	55.92	373.60	
		04/10/07	429.52		32.03		397.49	0.00	397.49			
		07/10/07	429.52		30.57		398.95	0.00	398.95	55.93		Transducer
RMW-63A	N. Olive	01/09/07	429.75		14.04		415.71	0.00	415.71	18.10	411.65	
		04/10/07	429.75		13.02		416.73	0.00	416.73			
		07/10/07	429.75		12.82		416.93	0.00	416.93	18.11		
RMW-63B	EPA	01/09/07	429.63		32.80		396.83	0.00	396.83	43.53	386.10	
		04/10/07	429.63		31.48		398.15	0.00	398.15			
		07/10/07	429.63		29.07		400.56	0.00	400.56	43.58		

TABLE 4
SUMMARY OF 2007 QUARTERLY GROUNDWATER ELEVATIONS THROUGH JULY
Wells Located in Premcor Facility

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group / Hartford, Illinois

Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation[1] (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-63C	Main Sand (below D Clay)	01/09/07	429.53		34.02		395.51	0.00	395.51	55.79	373.74	
		04/10/07	429.53		32.01		397.52	0.00	397.52			
		07/10/07	429.53		30.55		398.98	0.00	398.98	55.76		
RMW-64A	A Clay		433.52									
RMW-64B	EPA	01/09/07	433.52	37.85	38.59	395.67	394.93	0.74	395.51	44.18	389.34	
		04/10/07	433.52		35.82		397.70	0.00	397.70			
		07/10/07	433.52	33.90	36.29	399.62	397.23	2.39	399.09	43.90		
RMW-64C	Main Sand (below D Clay)	01/09/07	433.61		38.12		395.49	0.00	395.49	56.11	377.50	
		04/10/07	433.61	35.55	35.57	398.06	398.04	0.02	398.06			
		07/10/07	433.61	34.72	34.75	398.89	398.86	0.03	398.88	56.16		
RMW-65A	Main Silt	01/09/07	433.79		30.00		403.79	0.00	403.79		433.79	
		04/11/07	433.79		29.98		403.81	0.00	403.81			
		07/10/07	433.79		29.96		403.83	0.00	403.83	30.51		
RMW-65B	Main Sand	01/09/07	433.90		38.05		395.85	0.00	395.85		433.90	
		04/11/07	433.90		36.63		397.27	0.00	397.27			
		07/10/07	433.90		35.69		398.21	0.00	398.21	43.35		
RMW-65C	Main Sand (Intermediate)	01/09/07	433.80		37.86		395.94	0.00	395.94		433.80	
		04/11/07	433.80		36.40		397.40	0.00	397.40			
		07/10/07	433.80		35.60		398.20	0.00	398.20	68.35		
RMW-65D	Main Sand (Deep)	01/09/07	433.70		37.73		395.97	0.00	395.97		433.70	
		04/11/07	433.70		36.25		397.45	0.00	397.45			
		07/10/07	433.70		35.47		398.23	0.00	398.23	87.89		
RMW-65E	Main Sand (Basal)	01/09/07	433.78		37.79		395.99	0.00	395.99		433.78	
		04/11/07	433.78		36.31		397.47	0.00	397.47			
		07/10/07	433.78		35.52		398.26	0.00	398.26	>100		
RMW-66A	Main Silt	01/09/07	430.15		25.80		404.35	0.00	404.35		430.15	
		04/11/07	430.15		25.75		404.40	0.00	404.40			
		07/10/07	430.15		25.72		404.43	0.00	404.43	26.02		
RMW-66B	Main Sand (Shallow)	01/09/07	430.09		34.06		396.03	0.00	396.03		430.09	
		04/11/07	430.09		32.96		397.13	0.00	397.13			
		07/10/07	430.09		32.08		398.01	0.00	398.01	40.00		
RMW-66C	Main Sand (Intermediate)	01/09/07	430.19		34.15		396.04	0.00	396.04		430.19	
		04/11/07	430.19		33.00		397.19	0.00	397.19			
		07/10/07	430.19		32.14		398.05	0.00	398.05	64.98		
RMW-66D	Main Sand (Deep)	01/09/07	429.89		33.85		396.04	0.00	396.04		429.89	
		04/11/07	429.89		32.69		397.20	0.00	397.20			
		07/10/07	429.89		31.85		398.04	0.00	398.04	79.71		
RMW-66E	Main Sand (Basal)	01/09/07	429.99		33.93		396.06	0.00	396.06		429.99	
		04/11/07	429.99		32.79		397.20	0.00	397.20			
		07/10/07	429.99		31.95		398.04	0.00	398.04	>100		
RMW-67A	Main Silt	01/09/07	430.99							26.42	404.57	DRY, TD= January 2007
		04/11/07	430.99		25.93		405.06	0.00	405.06			
		07/11/07	430.99		26.03		404.96	0.00	404.96	26.30		
RMW-67B	Main Sand (Shallow)	01/09/07	431.12		35.06		396.06	0.00	396.06		431.12	
		04/11/07	431.12		34.31		396.81	0.00	396.81			
		07/11/07	431.12		33.62		397.50	0.00	397.50	40.41		

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Well	Stratum Screened	DATE	(A) Top of Casing Elevation (ft)	(B) Depth to Hydrocarbon (ft)	(C) Depth to Water (ft)	(A)-(B) Hydrocarbon Surface Elevation (ft)	(A)-(C) Water Surface Elevation (ft)	(C)-(B) Hydrocarbon Thickness (ft)	Piezometric Surface Elevation (ft)	Total Well Depth (TOC) (ft)	Total Depth Elevation (Top of Casing - Total Well Depth)	COMMENTS
RMW-67C	Main Sand (Intermediate)	01/09/07	430.94		34.87		396.07	0.00	396.07		430.94	
		04/11/07	430.94		34.13		396.81	0.00	396.81			
		07/11/07	430.94		33.41		397.53	0.00	397.53	67.88		
RMW-68A	N. Olive	01/09/07	432.70		18.62		414.08	0.00	414.08		432.70	
		04/11/07	432.70		18.65		414.05	0.00	414.05			
		07/10/07	432.70		17.58		415.12	0.00	415.12	19.12		
RMW-68B	B/C Clay (Permeable Lens)	01/09/07	432.92	29.59	29.62	403.33	403.30	0.03	403.32		432.92	
		04/11/07	432.92	27.70	29.81	405.22	403.11	2.11	404.76			
		07/10/07	432.92	25.80	29.79	407.12	403.13	3.99	406.24	29.96		
RMW-68C	EPA	01/09/07	432.76		35.28		397.48	0.00	397.48		432.76	
		04/11/07	432.76		33.47		399.29	0.00	399.29			
		07/10/07	432.76		31.82		400.94	0.00	400.94	43.59		
RMW-68D	Main Sand (below D Clay)	01/09/07	432.63		36.53		396.10	0.00	396.10		432.63	
		04/11/07	432.63		34.40		398.23	0.00	398.23			
		07/10/07	432.63		33.27		399.36	0.00	399.36	57.90		
RMW-68E	Main Sand (Intermediate)	01/09/07	432.51		36.31		396.20	0.00	396.20		432.51	
		04/11/07	432.51		34.25		398.26	0.00	398.26			
		07/10/07	432.51		33.18		399.33	0.00	399.33	72.90		
RMW-68F	Main Sand (Deep)	01/09/07	432.51		36.29		396.22	0.00	396.22		432.51	
		04/11/07	432.51		34.23		398.28	0.00	398.28			
		07/10/07	432.51		33.17		399.34	0.00	399.34	92.78		
RMW-68G	Main Sand (Basal)	01/09/07	432.46		36.27		396.19	0.00	396.19		432.46	
		04/11/07	432.46		34.18		398.28	0.00	398.28			
		07/10/07	432.46		33.11		399.35	0.00	399.35	>100		
RMW-69A	N. Olive	01/09/07	432.35		14.85		417.50	14.85	429.08		432.35	
		04/11/07	432.35		13.30		419.05	13.30	429.42			
		07/10/07	432.35		13.68		418.67	13.68	429.34	21.99		
RMW-69B	EPA	01/09/07	432.41		34.73		397.68	34.73	424.77		432.41	
		04/11/07	432.41	32.86	33.28	399.55	399.13	0.42	399.46			
		07/10/07	432.41	31.46	33.39	400.95	399.02	1.93	400.53	40.94		
RMW-69C	Main Sand (below D Clay)	01/09/07	432.43		35.61		396.82	0.00	396.82		432.43	
		04/11/07	432.43		33.94		398.49	0.00	398.49			
		07/11/07	432.43		32.97		399.46	0.00	399.46	53.71		
RMW-69D	Main Sand (Intermediate)	01/09/07	432.43		35.50		396.93	0.00	396.93		432.43	
		04/11/07	432.43		33.88		398.55	0.00	398.55			
		07/11/07	432.43		33.01		399.42	0.00	399.42	73.95		
RMW-69E	Main Sand (Deep)	01/09/07	432.56		35.61		396.95	0.00	396.95		432.56	
		04/11/07	432.56		34.00		398.56	0.00	398.56			
		07/11/07	432.56		33.13		399.43	0.00	399.43	93.59		
RMW-69F	Main Sand (Basal)	01/09/07	432.69		35.74		396.95	0.00	396.95		432.69	
		04/11/07	432.69		34.06		398.63	0.00	398.63			
		07/11/07	432.69		33.25		399.44	0.00	399.44	119.27		
RMW-70A	A Clay (Permeable Lens)	01/09/07	432.21		20.05		412.16	0.00	412.16		432.21	
		04/11/07	432.21									DRY
		07/11/07	432.21		19.98		412.23	0.00	412.23	20.46		
RMW-70B	Main Silt	01/09/07	432.30		21.84		410.46	0.00	410.46		432.30	
		04/11/07	432.30		20.47		411.83	0.00	411.83			
		07/11/07	432.30		20.72		411.58	0.00	411.58	33.66		

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RMW-70C	Main Sand (Shallow)	01/09/07	432.24		35.00		397.24	0.00	397.24		432.24	
		04/11/07	432.24		33.14		399.10	0.00	399.10			
		07/11/07	432.24		32.30		399.94	0.00	399.94	51.49		
RMW-70D	Main Sand (Intermediate)	01/09/07	432.07		34.73		397.34	0.00	397.34		432.07	
		04/11/07	432.07		33.03		399.04	0.00	399.04			
		07/11/07	432.07		32.08		399.99	0.00	399.99	67.35		
RMW-70E	Main Sand (Deep)	01/09/07	428.64		31.35		397.29	0.00	397.29		428.64	
		04/11/07	428.64		29.63		399.01	0.00	399.01			
		07/11/07	428.64		28.63		400.01	0.00	400.01	84.42		
RMW-70F	Main Sand (Basal)	01/09/07	428.83		31.53		397.30	0.00	397.30		428.83	
		04/11/07	428.83		29.85		398.98	0.00	398.98			
		07/11/07	428.83		28.88		399.95	0.00	399.95	116.28		
RMW-71A	Main Sand (Intermediate)	01/09/07	428.94		29.42		399.52	0.00	399.52		428.94	
		04/11/07	428.94		28.98		399.96	0.00	399.96			
		07/11/07	428.94		28.60		400.34	0.00	400.34	65.27		
RMW-71B	Main Sand (Deep)	01/09/07	428.76		29.24		399.52	0.00	399.52		428.76	
		04/11/07	428.76		28.77		399.99	0.00	399.99			
		07/11/07	428.76		28.36		400.40	0.00	400.40	85.21		
RMW-71C	Main Sand (Basal)	01/09/07	428.71		29.15		399.56	0.00	399.56		428.71	
		04/11/07	428.71		28.78		399.93	0.00	399.93			
		07/11/07	428.71		28.35		400.36	0.00	400.36	115.11		
RMW-72A	N. Olive	01/09/07	429.26								429.26	DRY
		04/10/07	429.26									DRY
		07/10/07	429.26							17 87		DRY
RMW-72B	EPA	01/09/07	429.30	33.00	36.31	396.30	392.99	3.31	395.57		429.30	
		04/10/07	429.30	30.92	32.40	398.38	396.90	1 48	398.05			
		07/10/07	429.30									Mobile ICE Unit Present
RMW-72C	Main Sand (below D Clay)	01/09/07	429.36		33.81		395.55	0.00	395.55		429.36	
		04/10/07	429.36		31.30		398.06	0.00	398.06			
		07/10/07	429.36		30.90		398.46	0.00	398.46	52.74		
RMW-73A	N. Olive	01/09/07	430.15		15.88		414.27	0.00	414.27		430.15	
		04/10/07	430.15		15.91		414.24	0.00	414.24			
		07/10/07	430.15		16.09		414.06	0.00	414.06	16.25		
RMW-73B	EPA	01/09/07	430.12	34.28	34.30	395.84	395 82	0.02	395.84		430.12	
		04/10/07	430.12	32.21	32.47	397.91	397.65	0.26	397.85			
		07/10/07	430.12	30.04	30.35	400.08	399.77	0.31	400.01	40.35		
RMW-73C	Main Sand (below D Clay)	01/09/07	430.16		34.97		395.19	0.00	395.19		430.16	
		04/10/07	430.16		32.87		397.29	0.00	397.29			
		07/10/07	430.16		31.39		398.77	0.00	398.77	53.76		
RMW-74	N. Olive	01/09/07	433.84		19.18		414.66	0.00	414.66		433.84	
		04/10/07	433.84		16.86		416.98	0.00	416.98			
		07/10/07	433 84		14.08		419.76	0.00	419.76	17 49		
RMW-75	N. Olive	01/09/07	432.57		18.12		414.45	0.00	414.45		432.57	
		04/10/07	432.57		15.28		417.29	0.00	417 29			
		07/10/07	432.57		14.36		418.21	0.00	418.21	19.38		

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RMW-76	N. Olive	01/09/07	432.34		17.64		414.70	0.00	414.70		432.34	
		04/10/07	432.34		15.19		417.15	0.00	417.15			
		07/10/07	432.34		15.03		417.31	0.00	417.31	17.28		
RMW-77	N. Olive	01/09/07	429.61							17.21	412.40	DRY, 'TD= January 2007
		04/10/07	429.61		16.16		413.45	0.00	413.45			
		07/10/07	429.61		14 50		415.11	0.00	415.11	17.58		
RMW-78	N. Olive	01/09/07	429.41		16.44		412.97	0.00	412.97	16.45	412.96	TD= October 2006
		04/10/07	429.41		14.99		414.42	0.00	414.42			
		07/10/07	429.41		14.84		414.57	0.00	414.57	17.33		
RMW-79	N. Olive	01/09/07	429.60		16.12		413.48	0.00	413.48	17.99	411.61	TD= October 2006
		04/10/07	429.60		13.77		415.83	0.00	415.83			
		07/10/07	429.60		14.66		414.94	0.00	414.94	18.76		
RMW-93A	N. Olive	01/09/07	429.19								429.19	DRY
		04/10/07	429.19									DRY
		07/10/07	429.19							20.47		DRY
RMW-93B	EPA	01/09/07	429.18	32.73	35.97	396.45	393.21	3.24	395.74		429.18	
		04/10/07	429.18	30.90	31.92	398.28	397.26	1.02	398.06			
		07/10/07	429.18	29.64	32.10	399.54	397.08	2.46	399.00	40.56		
RMW-94A	N. Olive	01/09/07	429.61		19.51		410.10	0.00	410.10	19.95	409.66	TD= October 2006
		04/10/07	429.61		19.53		410.08	0.00	410.08			
		07/10/07	429.61		19.54		410.07	0.00	410.07	19.94		
RMW-94B	Main Sand (Shallow)	01/09/07	429.56	33.21	35.66	396.35	393.90	2 45	395.81		429.56	
		04/10/07	429.56	31.06	31.81	398 50	397.75	0.75	398.34			
		07/10/07	429.56	29 96	31.74	399.60	397.82	1.78	399.21	45.34		
RMW-95	Main Sand (Shallow)	01/09/07 ***	432.66	36.78	38.51	395.88	394.15	1 73	395.50		432.66	Measured from top of well head
		04/10/07	429.68	31.25	31.59	398.43	398.09	0.34	398.36			
		07/10/07	429.68	30.09	31.70	399.59	397.98	1.61	399.24	45.31		
RMW-96	Main Sand (Shallow)	01/09/07 ***	431.69	35.57	37.46	396.12	394.23	1.89	395.70		431.69	Measured from top of well head
		04/10/07	429.68	31.27	31.67	398.41	398.01	0.40	398.32			
		07/10/07	429.68	30.00	32.22	399.68	397.46	2.22	399.19	45.93		
RMW-97	Main Sand (Shallow)	01/09/07 ***	432 94	36.89	38.99	396.05	393.95	2.10	395.59		432.94	Measured from top of well head
		04/10/07	429.83	31.39	31.87	398.44	397.96	0.48	398 33			
		07/10/07	429.83	30.06	32.61	399.77	397.22	2.55	399.21	46.24		
RMW-98A	Main Silt	01/09/07	429.75								429.75	DRY
		04/10/07	429.75									DRY
		07/10/07	429.75		24.30		405.45	0.00	405.45	24.72		
RMW-98B	Main Sand (Shallow)	01/09/07	429.69	33.33	34.96	396.36	394.73	1.63	396.00		429.69	
		04/10/07	429.69	30 71	33.76	398.98	395.93	3.05	398.31			
		07/10/07	429.69	29.03	36.71	400.66	392.98	7.68	398.97	39 62		
RPW-01	EPA / Main	01/09/07	431 44	56.26	56.31	375.18	375.13	0.05	375.17			
		04/10/07	431.44		33.14		398.30	0.00	398.30			
		07/10/07	431.44	37.50	38.72	393.94	392.72	1.22	393.67			

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SVE-1S	N. Olive	01/09/07	431.11		24.60		406.51	0.00	406.51	21.54	409.57	
		04/10/07	431.11		25.23		405.88	0.00	405.88			
		07/10/07	431.11									
SVE-1D	EPA	01/09/07	430.66	36.18	36.60	394.48	394.06	0.42	394.39	44.56	386.10	TD= January 2006
		04/10/07	430.66		33.12		397.54	0.00	397.54			
		07/10/07	430.66									
T-1	Main Sand (Shallow)	01/10/07	431.44							46.48	384.96	Skimmer Pump in Well
		04/11/07	431.44									Skimmer Pump in Well
		07/10/07	431.44	29.06	30.55	402.38	400.89	1.49	402.05	43.95		
TH2-88	Main Sand (Shallow)	01/09/07	430.88		34.08		396.80	0.00	396.80	> 100		
		04/11/07	430.88		32.31		398.57	0.00	398.57			
		07/11/07	430.88		31.33		399.55	0.00	399.55	>100		@P7 Well
River Dock	NA	01/09/07	--									
		04/11/07	--									DRY
		07/11/07	--									North Staff Gauge
River Dock	NA	01/09/07	--									Gauge Removed
		04/11/07	--									South Staff Gauge, Gauge Removed
Fire Pond	NA	01/09/07	442.21		7.40		434.81	0.00	434.81		442.21	
		04/10/07	442.21		7.27		434.94	0.00	434.94			
		07/10/07	442.21		7.36		434.85	0.00	434.85	16.85		Staff Gauge
Guard Basin	NA	01/09/07	432.10		15.46		416.64	0.00	416.64		432.10	
		04/12/07	432.10		15.89		416.21	0.00	416.21			
		07/11/07	432.10									Staff Gauge

NOTES:
NA = Not Applicable
= No data or DRY (See Comments)
(T xx/xx/xxxx) = Date transducer installed in well, however, data may be from miniTROLL or manual gauging
1 = Piezometric surface elevation = [(A)-(C)]+S.G.[(C)-(B)]
*** = TOC of well was temporarily altered with an extension (Extension length(ft) : RMW-57A - 1.80, RMW-57B- 1.79, RMW-48B-1.83, RMP-9C-1.73, RMP-10C- 2.55, RMP-11C-2.47, RMW-49B- 3.62, RMW-95 2.98, RMW-96-2.01, RMW-97-3.11)
SG = Specific gravity of hydrocarbon determined to be an average of 0.78 on the Premcor facility for data recorded during and after 9/03
MP- and SVE-series installed by Clayton in 6/03. MP-series installed as vacuum monitoring probes. SVE-series installed as soil vapor extraction wells.
DS-series, RMW-series, RMP-series and RPW-series installed by Clayton
Remaining wells installed by others. P-6N, E & S series wells immediately surround Production Well P-6
TOC elevations surveyed to USGS datum by CMT
Stratums qualified with a ? are currently under review
Top of casing elevation changes present in the table indicate that the associated wells have been re-surveyed
* Total depths for January 2007 are from July 2006 unless otherwise indicated

TABLE 5
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT (MDL) (a)	PRACTICAL QUANTITATION LIMIT (PQL) (a)	PROJECT DETECTION LIMIT (PDL) (b)
	Source	Method No.	Source	Method No.				
VOCs						(µg/L)	(µg/L)	(µg/L)
	SW-846	5030	SW-846	8260	Benzene	0.5	2	5
	SW-846	5030	SW-846	8260	Ethylbenzene	1	5	700
	SW-846	5030	SW-846	8260	Methyl tertiary butyl ether (MTBE)	0.5	2	70
	SW-846	5030	SW-846	8260	Toluene	1	5	1,000
	SW-846	5030	SW-846	8260	Xylenes (total)	1	5	10,000
Metals						(mg/L)	(mg/L)	(mg/L)
	SW-846	3020A	SW-846	7041	Antimony	0.0017	0.005	0.006
	SW-846	3020A	SW-846	7060A	Arsenic	0.0007	0.003	0.05
	SW-846	3005A	SW-846	6010	Barium	0.0024	0.005	2.0
	SW-846	3005A	SW-846	6010	Beryllium	0.0003	0.001	0.004
	SW-846	3005A	SW-846	6010	Cadmium	0.0003	0.002	0.005
	SW-846	3005A	SW-846	6010	Chromium-Total	0.004	0.01	0.1
	SW-846	3005A	SW-846	6010	Cobalt	0.0022	0.01	1.0
	SW-846	3005A	SW-846	6010	Iron	0.007	0.02	5.0
	SW-846	3020A	SW-846	7421	Lead	0.0004	0.002	0.0075
	--	--	SW-846	7470	Mercury	0.000051	0.0002	0.002
	SW-846	3005A	SW-846	6010	Nickel	0.0033	0.01	0.1
	SW-846	3020A	SW-846	7740	Selenium	0.0035	0.006	0.05
	SW-846	3005A	SW-846	6010	Silver	0.003	0.01	0.05
	SW-846	3005A	SW-846	6010	Vanadium	0.0032	0.01	0.049
	SW-846	3005A	SW-846	6010	Zinc	0.0021	0.01	5.0

TABLE 5
COMPOUND/ANALYTE LIST FOR WATER SAMPLES - VOCs & Inorganics
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
The Hartford Working Group / Hartford, Illinois

PARAMETER	PREPARATION METHOD		ANALYTICAL METHOD		COMPOUND	METHOD DETECTION LIMIT (MDL) [a]	PRACTICAL QUANTITATION LIMIT (PQL) [a]	PROJECT DETECTION LIMIT (PDL) [b]
	Source	Method No.	Source	Method No.				
General						(mg/L)	(mg/L)	(mg/L)
	--	--	Standard Method	M2320B	Alkalinity, Total (as, Ca, CO_3)	0	0	NA
	--	--	EPA Method	E350.1	Ammonia as N	0.04	0.1	NA
	--	--	SW-846	9251.0	Chloride	0.6	1	200
	--	--	Standard Method	M5220D	COD	7.3	20	NA
	--	--	SW-846	9010B, 9014	Cyanide Total	0.003	0.007	0.2
	--	--	SW-846	9012A	Cyanide Total	0.003	0.007	0.2
	--	--	Standard Method	M2340C	Hardness (as, Ca, CO_3)	3	5	NA
	--	--	EPA Method	E353.2	Nitrate as N	0.010	0.05	10.0
	--	--	EPA Method	E353.2	Nitrate-Nitrite	0.010	0.05	NA
	--	--	EPA Method	E353.2	Nitrite as N	0.01	0.05	NA
	--	--	EPA Method	E353.3	Nitrite as N	0.01	0.01	NA
	--	--	EPA Method	E365.2	Phosphorus as P	0.01	0.02	NA
	--	--	EPA Method	E365.4	Phosphorus as P	0.02	0.02	NA
	--	--	EPA Method	E365.2 (D)	Phosphorus, Dissolved as P	0.01	0.02	NA
	--	--	EPA Method	E365.4 (D)	Phosphorus, Dissolved as P	0.02	0.02	NA
	--	--	SW-846	9036.0	Sulfate	40	40	400
	--	--	SW-846	9038.0	Sulfate	1.0	5	400
	--	--	Standard Method	M4500SD	Sulfide	0.013	0.50	NA
	--	--	Standard Method	M2540C	Total Dissolved Solids	10	20	NA
	--	--	EPA Method	E415.1	Total Organic Carbon	0.5	1	NA
	--	--	Standard Method	M2540D	Total Suspended Solids	5	6	NA

NOTES:
µg/L = Micrograms per liter
mg/L = Milligrams per liter [except for ph (unitless)]
[a] = Method detection limit and practical quantitation limit as identified by Teklab, Inc. (Hennessy, 2007)
[b] = Project detection limit (PDL) is the IPCB TACO Tier 1 Class I Groundwater Remediation Objective (02/15/07)
NA = Not available
-- = Not applicable

TABLE 6
SAMPLE CONTAINER, PRESERVATION, AND HOLDING TIME REQUIREMENTS FOR WATER SAMPLES
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR000128249
The Hartford Working Group / Hartford, Illinois

PARAMETER	ANALYSIS	HOLDING TIME	CONTAINER	PRESERVATION
Organics	BTEX and MTBE	14 days	3-40 ml VOC vials	HCl to pH < 2, no headspace Maintained at 4 +/- 2 degrees Celcius
Metals	Inorganic Metals	180 days	500 ml plastic jar	HNO_3 to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Mercury	28 days		
General	Alkalinity	14 days	1 L plastic jar	Maintained at 4 +/- 2 degrees Celcius
	Chloride	28 days		
	Sulfate	28 days		
	Hardness	180 days		
	Nitrite	48 hours		
	Total Dissolved Solids (TDS)	7 days		
	Total Suspended Solids (TSS)	7 days		
	Total Cyanide	14 days	250 ml plastic jar	NaOH to pH>12 Maintained at 4 +/- 2 degrees Celcius
	Chemical Oxygen Demand (COD)	28 days	500 ml plastic jar	H2SO4 to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Ammonia, Total	28 days		
	Phosphorus, Total	28 days		
	Nitrate +/- Nitrite	28 days		
	Phosphorus, Dissolved	28 days	250 ml plastic	H2SO4 to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Total Organic Carbon (TOC)	28 days	125 ml plastic	H2SO4 to pH<2 Maintained at 4 +/- 2 degrees Celcius
	Sulfide, Total	7 days	250 ml plastic jar	NaOH and ZnAcetate to pH>9 Maintained at 4 +/- 2 degrees Celcius

Table 7
Summary of Groundwater Analytical Results - BTEX and MTBE - July 2007

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group Inc. / Hartford, Illinois

Well ID	Date	Constituent				
		Benzene	Toluene	Ethylbenzene	Xylene (total)	Methyl tert-butyl ether
TACO Comparison Value		5 ug/l	1,000 ug/l	700 ug/l	10,000 ug/l	70 ug/l
HMW-25	7/13/2007	2 U	5 U	5 U	5 U	2 U
HMW-26	7/13/2007	2 U	5 U	5 U	5 U	2 U
HMW-27	7/13/2007	2 U	5 U	5 U	5 U	2 U
HMW-28	7/16/2007	2 U	5 U	5 U	5 U	2 U
HMW-29	7/16/2007	2 U	5 U	5 U	5 U	2 U
HMW-39B	7/23/2007	2 U	5 U	5 U	5 U	2 U
HMW-39C	7/20/2007	2 U	5 U	5 U	5 U	2 U
HMW-40C	7/12/2007	2 U	5 U	5 U	5 U	2 U
HMW-49C	7/18/2007	250	289	150	237	317
HMW-49D[1]	7/16/2007	444	5.6	1.5 J	6.6	84.6
HMW-49D	7/16/2007	451	5.2	1.4 J	6.3	81.3
HMW-50A	7/13/2007	2 U	5 U	5 U	5 U	2 U
HMW-50B	7/18/2007	2 U	5 U	5 U	5 U	2 U
HMW-50C	7/16/2007	158	10.8	1 J	16.5	22.9
HMW-52C	7/13/2007	2 U	5 U	5 U	5 U	2 U
MP-81C	7/12/2007	2 U	5 U	5 U	5 U	2 U
MP-89A	7/18/2007	2 U	5 U	5 U	5 U	2 U
MP-89C	7/13/2007	2 U	5 U	5 U	5 U	2 U
MP-92D	7/12/2007	2 U	5 U	5 U	5 U	2 U

Notes
[ ] =Exceeds Screening Criteria
[1] = Denotes Duplicate Sample
U = Not Detected (value preceding "U" denotes detection limit)
J = Estimated value
R = RPD outside accepted recovery limits
S = Spike Recovery outside accepted recovery limits
All units are in ug/L-micrograms per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

Table 8
Summary of Groundwater Analytical Results - Metals (Total and Dissolved) - July 2007

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group Inc. / Hartford, Illinois

Well ID	Date	Constituent														
		Antimony	Antimony (Dissolved)	Arsenic	Arsenic (Dissolved)	Barium	Barium (Dissolved)	Beryllium	Beryllium (Dissolved)	Cadmium	Cadmium (Dissolved)	Chromium	Chromium (Dissolved)	Cobalt	Cobalt (Dissolved)	Iron
TACO Comparison Value		0.006 mg/l	0.006 mg/l	0.05 mg/l	0.05 mg/l	2 mg/l	2 mg/l	0.004 mg/l	0.004 mg/l	0.005 mg/l	0.005 mg/l	0.1 mg/l	0.1 mg/l	1 mg/l	1mg/l	5 mg/l
HMW-25	7/13/2007	0.0021 U	0.0024 J	0.0009 J	0.003 U	0.245	0.229	0.001 U	0.001 U	0.0005 J	0.0007 J	0.01 U	0.01 U	0.0027 J	0.0029 J	0.328
HMW-26	7/13/2007	0.002 U	0.0023 J	0.0039	0.0018 J	0.161	0.139	0.001 U	0.001 U	0.0014 J	0.0014 J	0.01 U	0.01 U	0.01 U	0.01 U	26
HMW-27	7/13/2007	0.002 U	0.0026 J	0.003 U	0.003 U	0.0995	0.0997	0.001 U	0.001 U	0.0004 J	0.0008 J	0.01 U	0.01 U	0.0067 J	0.008 J	0.418
HMW-28	7/16/2007	0.005 U	0.0029 U	0.003 U	0.003 U	0.0913	0.0973	0.001 U	0.001 U	0.0006 U	0.0005 J	0.01 U	0.01 U	0.0104	0.0037 J	0.101
HMW-29	7/16/2007	0.005 U	0.005 U	0.0022 J	0.0012 J	0.1	0.123	0.001 U	0.001 U	0.0012 U	0.001 J	0.01 U	0.01 U	0.0033 J	0.0044 J	5.07
HMW-39B	7/23/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.367	0.401	0.001 U	0.001 U	0.0011 U	0.0006 U	0.0046 J	0.01 U	0.0026 U	0.0022 U	0.0223
HMW-39C	7/20/2007	0.005 U	0.005 U	0.0009 J	0.003 U	0.422	0.447	0.001 U	0.001 U	0.0007 J	0.0012 J	0.01 U	0.01 U	0.0025 J	0.01 U	5.22
HMW-40C	7/12/2007	0.005 U	0.005 U	0.171	0.002 J	0.447	0.345	0.001 U	0.001 U	0.0013 J	0.0014 J	0.01 U	0.01 U	0.0023 U	0.0034 U	25.1
HMW-49C	7/18/2007	0.005 U	0.005 U	0.0066	0.0066	0.767	0.414	0.0016	0.001 U	0.0122	0.0011 U	0.0806	0.01 U	0.0233	0.0027 J	54.6
HMW-49D[1]	7/16/2007	0.005 U	0.0021 U	0.003 U	0.003 U	0.256	0.273	0.001 U	0.001 U	0.001 U	0.0011 U	0.01 U	0.01 U	0.01 U	0.0025 J	25.6
HMW-49D	7/16/2007	0.0018 U	0.005 U	0.003 U	0.003 U	0.296	0.277	0.0003 J	0.001 U	0.0016 U	0.001 U	0.01 U	0.01 U	0.0047 J	0.0027 J	26
HMW-50A	7/13/2007	0.003 U	0.0027 J	0.0015 J	0.0007 J	0.0538	0.0356	0.001 U	0.001 U	0.0005 J	0.0004 J	0.0048 J	0.01 U	0.0024 J	0.01 U	1.2
HMW-50B	7/18/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.282	0.298	0.001 U	0.001 U	0.0007 J	0.0011 U	0.005 J	0.01 U	0.0038 J	0.0022 J	5.66
HMW-50C	7/16/2007	0.005 U	0.0017 U	0.003 U	0.003 U	0.25	0.258	0.001 U	0.001 U	0.002 U	0.0003 J	0.01 U	0.01 U	0.0033 J	0.01 U	5.69
HMW-52C	7/13/2007	0.0021 U	0.0019 J	0.0044	0.0015 J	0.426	0.312	0.0003 J	0.001 U	0.002	0.0011 J	0.0088 J	0.01 U	0.0076 J	0.01 U	22.6 S
MP-81C	7/12/2007	0.0025 U	0.005 U	0.003 U	0.003 U	0.0646	0.0592	0.001 U	0.001 U	0.0003 J	0.0008 J	0.01 U	0.01 U	0.0022 U	0.0022 U	0.0426
MP-89A	7/18/2007	0.005 U		0.003 U		0.0519		0.001 U		0.002 U		0.01 U		0.01 U		0.222
MP-89A	7/23/2007		0.005 U		0.0007 J		0.0661		0.001 U		0.0006 U		0.01 U		0.0044 U	
MP-89C	7/13/2007	0.0035 U	0.003 J	0.005	0.0022 J	0.166	0.0586	0.0003 J	0.001 U	0.0025	0.0012 J	0.0053 J	0.01 U	0.0303	0.0219	23
MP-92D	7/12/2007	0.005 U	0.005 U	0.0063	0.0056	0.154	0.164	0.001 U	0.001 U	0.0011 J	0.0009 J	0.01 U	0.01 U	0.0046 U	0.0053 U	9.23

Table 8
Summary of Groundwater Analytical Results - Metals (Total and Dissolved) - July 2007

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group Inc. / Hartford, Illinois

Well ID	Date	Constituent														
		Iron (Dissolved)	Lead	Lead (Dissolved)	Mercury	Mercury (Dissolved)	Nickel	Nickel (Dissolved)	Selenium	Selenium (Dissolved)	Silver	Silver (Dissolved)	Vanadium	Vanadium (Dissolved)	Zinc	Zinc (Dissolved)
TACO Comparison Value		5 mg/l	0.0075 mg/l	0.0075 mg/l	0.002 mg/l	0.002 mg/l	0.1 mg/l	0.1 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.049 mg/l	0.049 mg/l	5 mg/l	5 mg/l
HMW-25	7/13/2007	0.0076 J	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0067 J	0.0056 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.009 U	0.0174
HMW-26	7/13/2007	24.4	0.002 U	0.002 U	0.0002 U	0.0002 U	0.004 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0036 J	0.0042 J	0.0112 U	0.0048 J
HMW-27	7/13/2007	0.358	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0129	0.0124	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0186 U	0.007 J
HMW-28	7/16/2007	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0168	0.0146	0.0244	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0079 U	0.0053 U
HMW-29	7/16/2007	4.93	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0063 J	0.0071 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0111 U	0.0077 U
HMW-39B	7/23/2007	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0057 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0051 J	0.023	0.0122
HMW-39C	7/20/2007	5.54	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0035 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0151	0.0067 J
HMW-40C	7/12/2007	0.337	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.0105	0.0068 J	0.0372	0.006 U	0.01 U	0.01 U	0.0063 J	0.01 U	0.0422	0.0088 J
HMW-49C	7/18/2007	5.59	0.038	0.0113	0.00006 J	0.0002 U	0.0773	0.0059 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0915	0.0032 J	0.562	0.0201
HMW-49D[1]	7/16/2007	24.5	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0135 U	0.01 U
HMW-49D	7/16/2007	25	0.0007 J	0.002 U	0.0002 U	0.0002 U	0.0038 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0037 J	0.01 U	0.0206 U	0.01 U
HMW-50A	7/13/2007	0.02 U	0.0004 J	0.002 U	0.0002 U	0.0002 U	0.0042 J	0.01 U	0.006 J	0.006 U	0.01 U	0.01 U	0.0048 J	0.0042 J	0.0104 U	0.0256
HMW-50B	7/18/2007	6.02	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0034 J	0.01 U	0.006 UJ	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0061 U	0.0098 J
HMW-50C	7/16/2007	3.1	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 R	0.01 U	0.01 U	0.01 U	0.01 U	0.0146 U	0.0026 U
HMW-52C	7/13/2007	12.4	0.0098	0.002 U	0.0002 U	0.0002 U	0.0129	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0195	0.01 U	0.183 U	0.01 U
MP-81C	7/12/2007	0.02 U	0.002 U	0.0006 J	0.0002 U	0.0002 U	0.0147	0.0157	0.0407	0.0276	0.01 U	0.01 U	0.01 U	0.01 U	0.0159	0.0076 J
MP-89A	7/18/2007		0.002 U		0.0002 U		0.0034 J		0.006 U		0.01 U		0.01 U		0.127	
MP-89A	7/23/2007	0.02 U		0.0004 J		0.0002 U		0.01 U		0.006 U		0.01 U		0.0047 J		0.129
MP-89C	7/13/2007	12.6	0.0025	0.002 U	0.0002 U	0.0002 U	0.0623	0.0471	0.273	0.26	0.01 U	0.01 U	0.0136	0.01 U	0.0436 U	0.0107
MP-92D	7/12/2007	9.07 S	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0048 J	0.0049 J	0.006 U	0.006 U	0.01 U	0.003 J	0.01 U	0.01 U	0.005 J	0.0036 J

Notes
=Exceeds Screening Criteria
[1] = Denotes Duplica
U = Not Detected (value preceding "U" denotes detection l
J = Estimated value
R = RPD outside accepted recovery limits
S = Spike Recovery outside accepted recovery limits
All units are in mg/L-milligrams per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

Table 9
Summary of Grounwater Analytical Results - General Chemistry and Natural Attentuation Parameters - July 2007

1190500002 -- Madison County -- ILD041889023
The Hartford Working Group Inc. / Hartford, Illinois

Well ID	Date	Constituent															
		Alkalinity (as CaCO3)	Ammonia (as N)	Chemical Oxygen Demand	Chloride	Cyanide	Hardness (as CaCO3)	Nitrate	Nitrate plus Nitrite (as N)	Nitrite (as N)	Phosphorus	Phosphorus (Dissolved)	Sulfate	Sulfide	Total Dissolved Solids (TDS)	Total Organic Carbon	Total Suspended Solids
TACO Comparison Value		(mg/l)	(mg/l)	(mg/l)	200 mg/l	0.2 mg/l	(mg/l)	10 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)	400 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)
HMW-25	7/13/2007	504	0.1 U	11 J	63	0.007 UJ	460	0.049 J	0.049 U	0.01 U	0.11	0.045	40 U	0.18 J	652	5.6	6 U
HMW-26	7/13/2007	612	0.3 U	20 U	115	0.007 U	990	0.017 J	0.017 U	0.01 U	0.326	0.285	381	0.05 J	1420	2	61
HMW-27	7/13/2007	620	0.1 U	20 U	5	0.007 U	690	0.195	0.195	0.01 U	0.027	0.022	116	0.05 U	790	3.2	6 U
HMW-28	7/16/2007	524	0.1 U	24	17	0.007 U	600	1.27	1.28	0.02	0.074 U	0.023 U	138	0.01 J	738	5.5 U	6 U
HMW-29	7/16/2007	506	0.04 U	14 J	31	0.007 U	590	0.033 J	0.033 U	0.01 U	0.097 U	0.074 U	128	0.02 J	698	2.3 U	13
HMW-39B	7/23/2007					0.007 U						0.053					
HMW-39C	7/20/2007	228	0.31	17 J	221	0.007 U	350	0.101	0.101	0.01 U	0.359	0.292	40 U	0.05 U	640	1.6 U	13
HMW-40C	7/12/2007	326	0.1 U	19 J	23	0.007 U	370	1.81	1.86	0.05	0.208	0.034 U	40 U	0.19	386	2.5	71
HMW-49C	7/18/2007	516	0.08 U	124	18	0.007 U	510	0.014 J	0.014 U	0.01 U	0.45	0.065 U	40 U	0.22 J	588	19	620
HMW-49D[1]	7/16/2007	492	0.17 U	34	42	0.007 U	450	0.035 J	0.046 U	0.01	0.623	0.623	40 U	0.06	546	4.6 U	69
HMW-49D	7/16/2007	498	0.18 U	38	40	0.007 U	430	0.04 J	0.04 U	0.01 U	0.611	0.637	40 U	0.04 J	556	4.8 U	70
HMW-50A	7/13/2007	462	0.1 U	20 U	19	0.007 U	740	2.34	2.34	0.01 U	0.266	0.247	336	0.07 J	1000	2.2	26
HMW-50B	7/18/2007	294	1.65	20 J	394	0.007 U	920	0.026 J	0.026 U	0.01 U	0.454	0.4	361	0.04 J	1410	2.2 U	23
HMW-50C	7/16/2007	540	0.56 U	56	375	0.007 U	780	0.048 J	0.048 U	0.01 U	0.749	0.727	40 U	8.5	1160	2.2 U	21
HMW-52C	7/13/2007	614	0.16 U	24	56 J	0.304	770	0.013 J	0.013 U	0.01 U	0.532	0.201	124	0.21 J	942	1.8	651
MP-81C	7/12/2007	588	0.1 U	20 U	29	0.007 U	680 S	11.2	11.2	0.01 U	0.067	0.019	142	0.05 U	922	2.8	6 U
MP-89C	7/13/2007	398	0.11	16 J	23	0.007 U	1250	1.29	1.29	0.03	0.597	0.055	856	0.16 J	1660	2.6	161
MP-92D	7/12/2007	628	0.05 U	9 J	57	0.007 U	780	0.099	0.99 U	0.01 U	0.078	0.063	96	0.03 J	840	2.6	26

Notes
[ ] =Exceeds Screening Criteria
[1] = Denotes Duplicate Sample
U = Not Detected (value preceding "U" denotes detection limit)
J = Estimated value
R = RPD outside accepted recovery limits
S = Spike Recovery outside accepted recovery limits
All units are in mg/L-milligrams per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

TABLE 10
INDICATOR PARAMETERS - JULY 2007 QUARTERLY SAMPLING
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

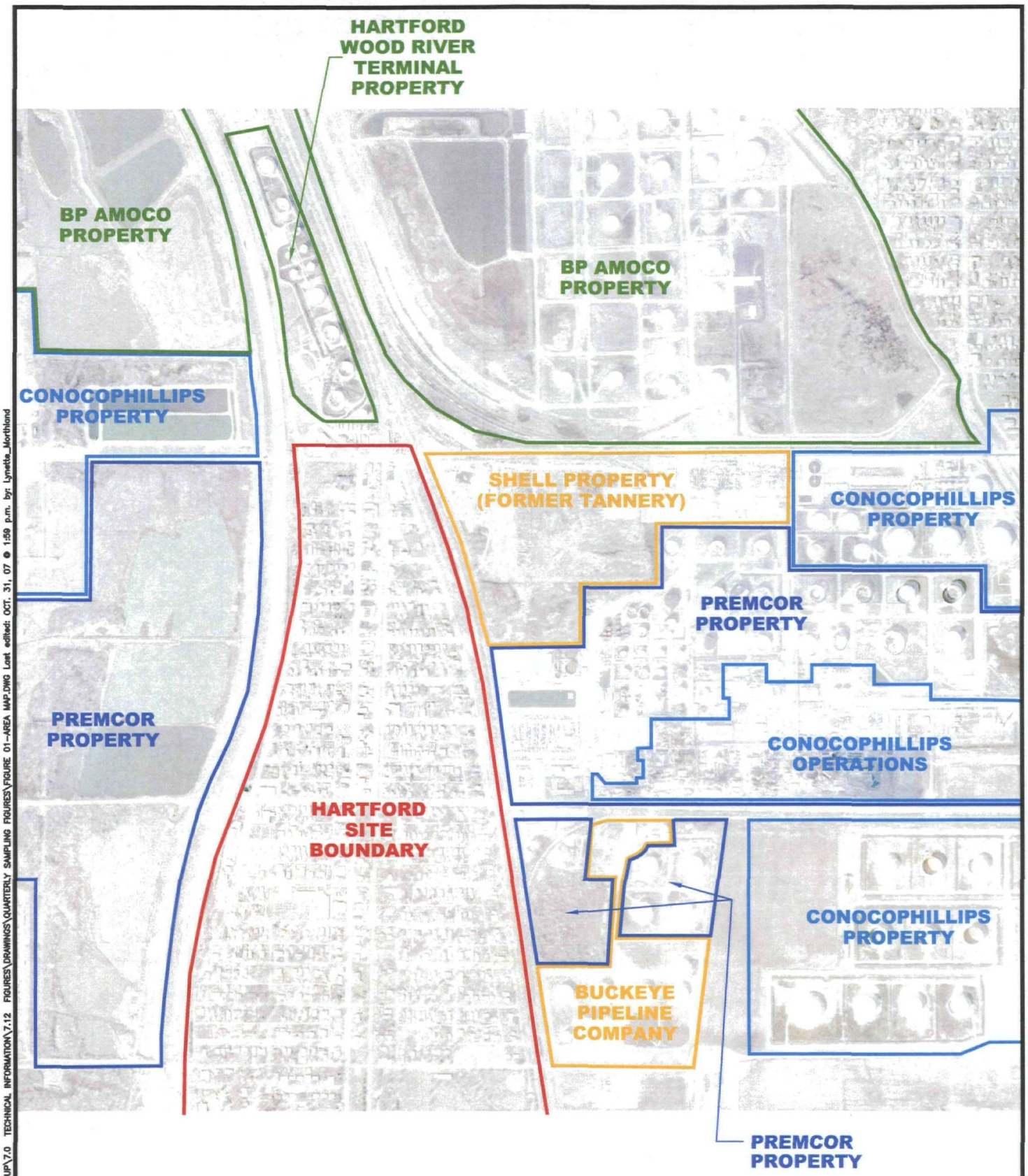
Well Number	Date	Temperature °C	pH (std. units)	Conductivity (uS/cm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	ORP (mV)
THIRD QUARTER 2007							
HMW-25	07/13/07	19.60	6.61	5198000	322.2	0.46	-216
HMW-26	07/13/07	18.81	6.57	8760000	2284	0.02	-379
HMW-27	07/13/07	19.27	6.51	5690000	7.109	0.02	-332
HMW-28	07/16/07	17.02	6.51	5077000	15.62	0.18	-270
HMW-29	07/16/07	16.86	6.63	4974000	6.857	0.07	-344
HMW-39B	07/23/07						
HMW-39C	07/20/07	15.39	7.11	884.3	17.94	0.03	-229
HMW-40C	07/12/07	17.44	6.99	3255000	150.3	0.07	-172
HMW-49C	07/18/07						
HMW-49D	07/16/07	20.15	6.60	4995000	11.31	0.03	-244
HMW-50A	07/13/07	16.19	6.74	6355000	27.76	0.06	-133
HMW-50B	07/18/07	20.74	7.08	1086000	8.861	0.01	-288
HMW-50C	07/16/07	18.37	6.71	9977000	3.396	0.01	-300
HMW-52C	07/13/07	18.10	6.65	6707000	270.8	0.03	-117
MP-81C	07/12/07	17.52	6.70	6621000	3.636	940	-78
MP-89A	07/18/07						
MP-89C	07/13/07	17.15	6.58	9351000	171.6	0.05	-104
MP-92D	07/12/07	18.31	6.63	1160	9.984	0.02	-371

NOTES:

Highlighted wells were purged dry and sampled with a peristaltic pump and/or 2" bailer. No indicator parameters were collected.

°C = degrees Centigrade
mg/L = milligrams per liter
mV = millivolts
NM = Not Measured
ntu = nephelometric turbidity units
uS/cm = microsiemens per centimeter

Figures



NOT TO SCALE

N

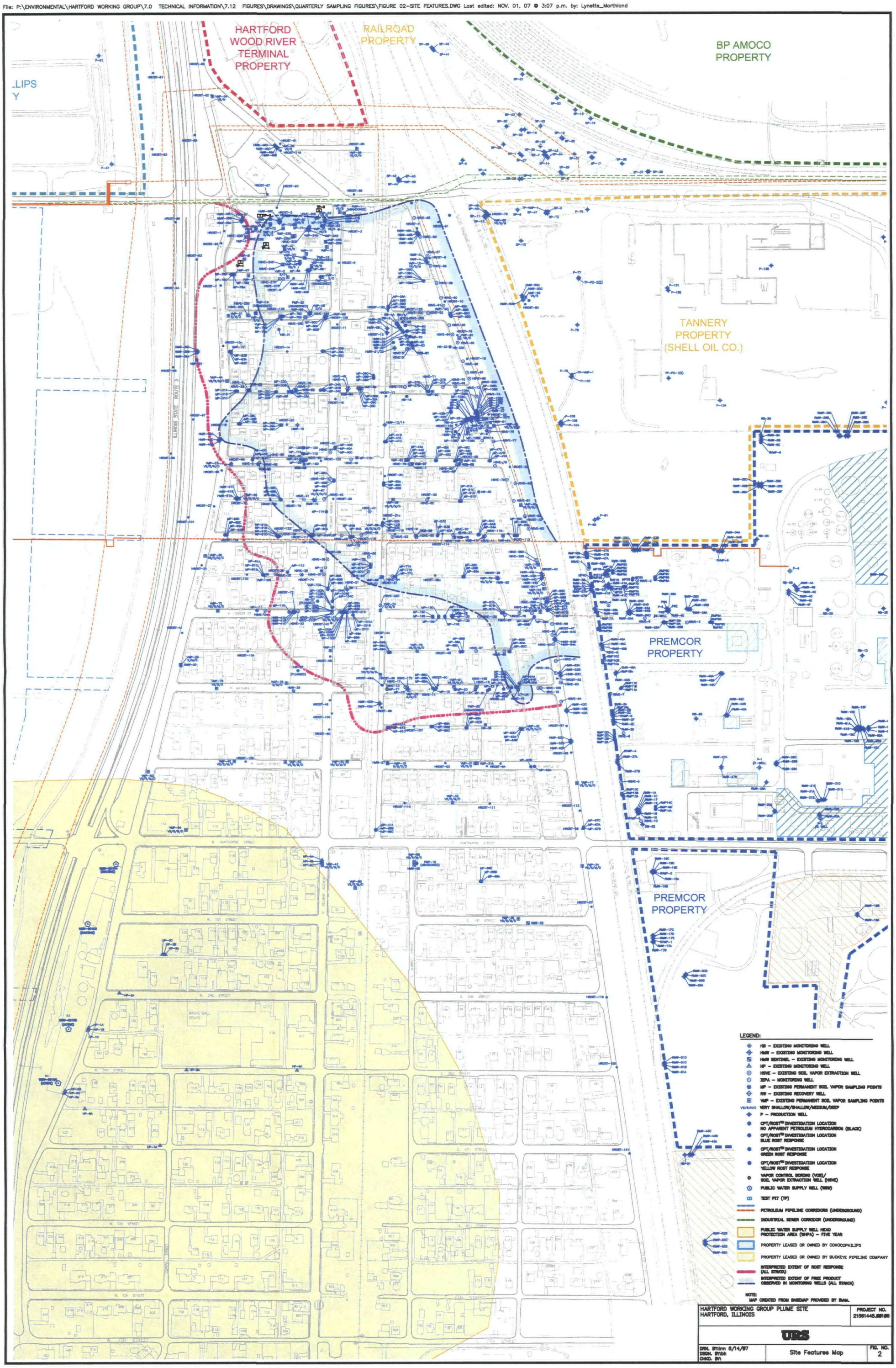
NOTE:

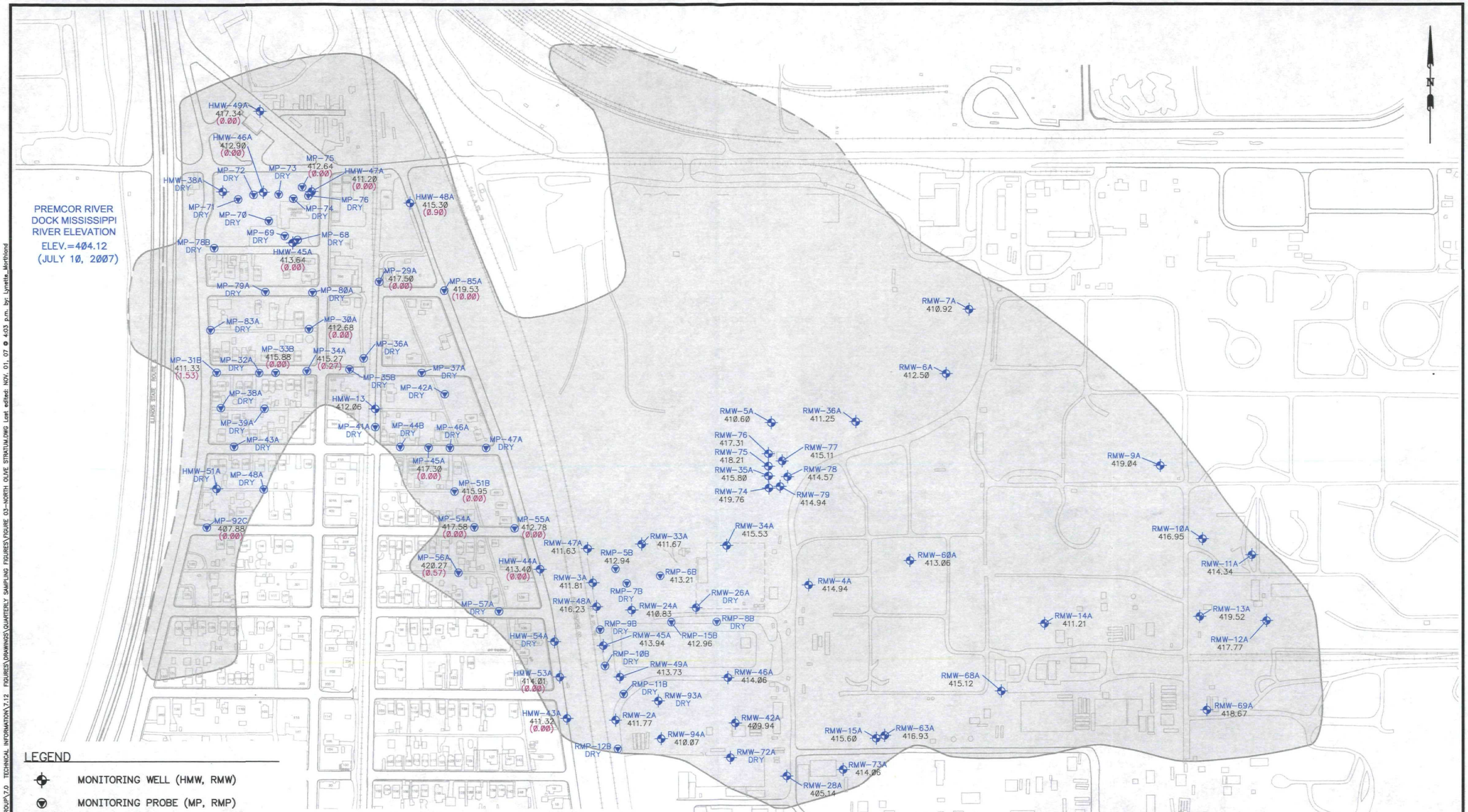
MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS		PROJECT NO. 21561445.00106
URS		
DRN. BY:lrm 9/12/07 DSGN. BY:bh CHKD. BY:	VILLAGE OF HARTFORD, IL AND SURROUNDING AREA MAP	FIG. NO. 1

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 01-AREA MAP.DWG Last edited: OCT. 31, 07 @ 1:59 p.m. by: Lynette_Northland

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 02-SITE FEATURES.DWG Last edited: NOV. 01, 07 @ 3:07 p.m. by: Lynette_Morthland





LEGEND

- MONITORING WELL (HMW, RMW)
- MONITORING PROBE (MP, RMP)
- 413.78 GROUNDWATER ELEVATION (FT. MSL)
- (0.68) SATURATED THICKNESS OF STRATUM (FT.)
- (0.00) WATER IN PROBE/WELL IS WITHIN THE SUMP OF WELL AND/OR BELOW BASE OF STRATUM
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)

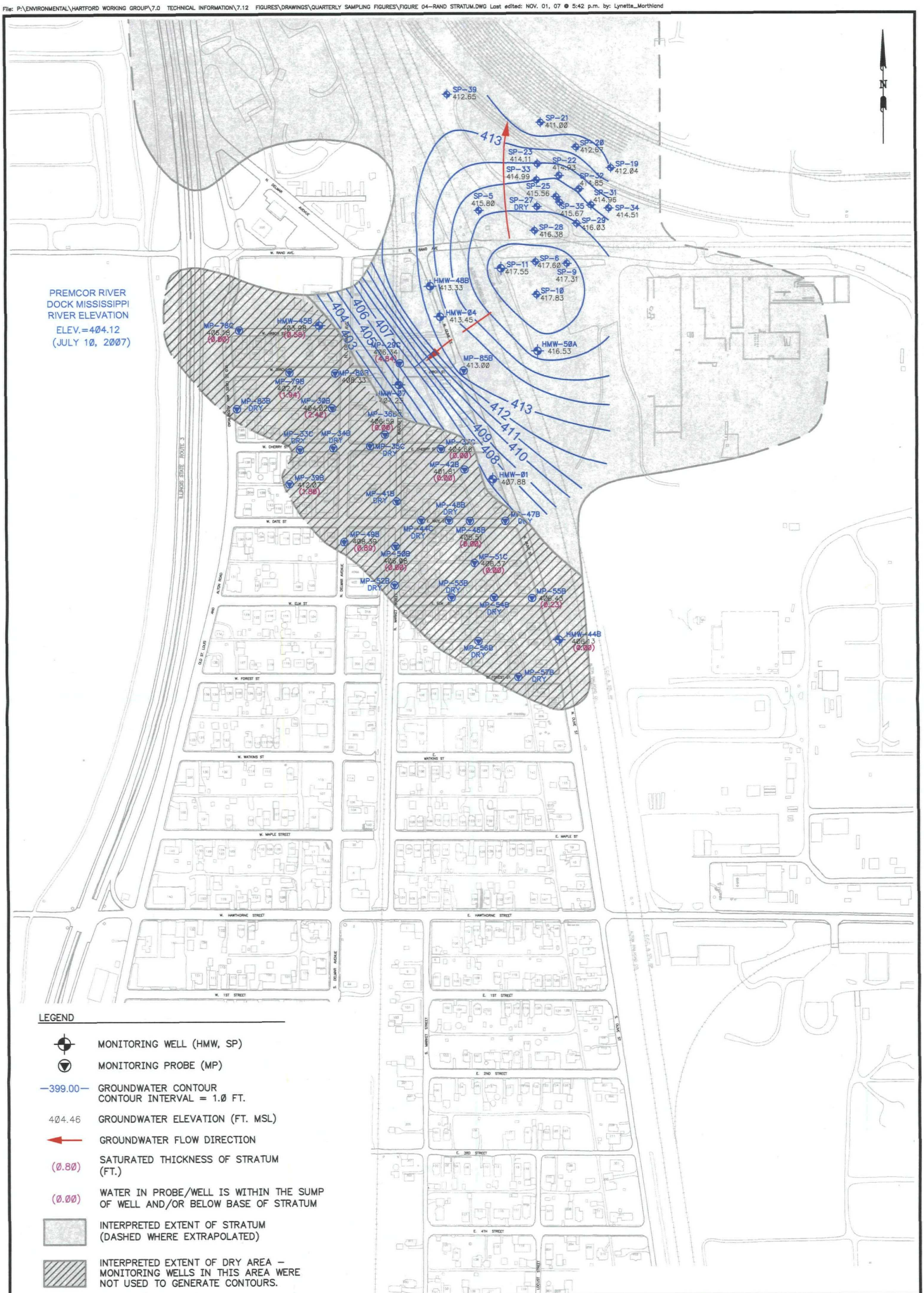
NOTES:

1. GROUNDWATER ELEVATIONS CORRECTED FOR FREE PHASE HYDROCARBONS IF PRESENT.
2. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS	PROJECT NO. 21561445.00106
URS	
DRN. BY: lrm 9/10/07 DSGN. BY: bh CHKD. BY:	Groundwater Elevation Map North Olive Stratum
	FIG. NO. 3

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 03-NORTH OLIVE STRATUM.DWG Last edited: NOV. 01, 07 @ 4:03 p.m. by: Lynette_Northlond

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 04-RAND STRATUM.DWG Last edited: NOV. 01, 07 @ 5:42 p.m. by: Lynette_Morthland



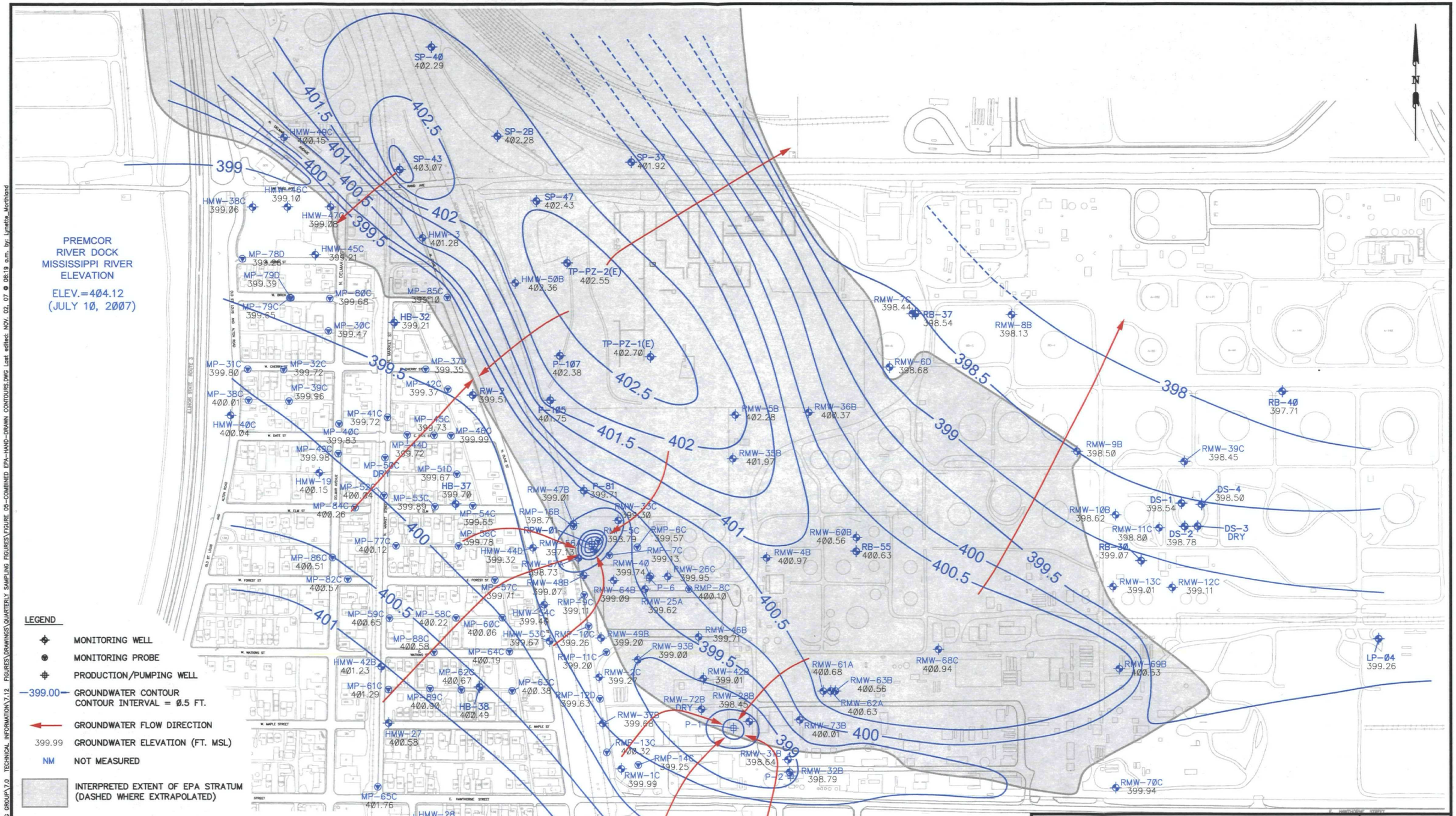
LEGEND

- MONITORING WELL (HMW, SP)
- MONITORING PROBE (MP)
- —399.00— GROUNDWATER CONTOUR CONTOUR INTERVAL = 1.0 FT.
- 404.46 GROUNDWATER ELEVATION (FT. MSL)
- GROUNDWATER FLOW DIRECTION
- (0.80) SATURATED THICKNESS OF STRATUM (FT.)
- (0.00) WATER IN PROBE/WELL IS WITHIN THE SUMP OF WELL AND/OR BELOW BASE OF STRATUM
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF DRY AREA – MONITORING WELLS IN THIS AREA WERE NOT USED TO GENERATE CONTOURS.

NOTES:

1. GROUNDWATER ELEVATIONS CORRECTED FOR FREE PHASE HYDROCARBONS IF PRESENT.
2. MAP PRESENTS WELLS AND AVAILABLE GROUNDWATER ELEVATIONS FOR ONLY THOSE WELLS EVALUATED AS APPROPRIATELY SCREENING THE RAND STRATUM.
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS	PROJECT NO. 21561445.00106
URS	
DRN. BY:lrm 9/13/07 DSGN. BY:bh CHKD. BY:	Groundwater Flow Map Rand Stratum
	FIG. NO. 4



LEGEND

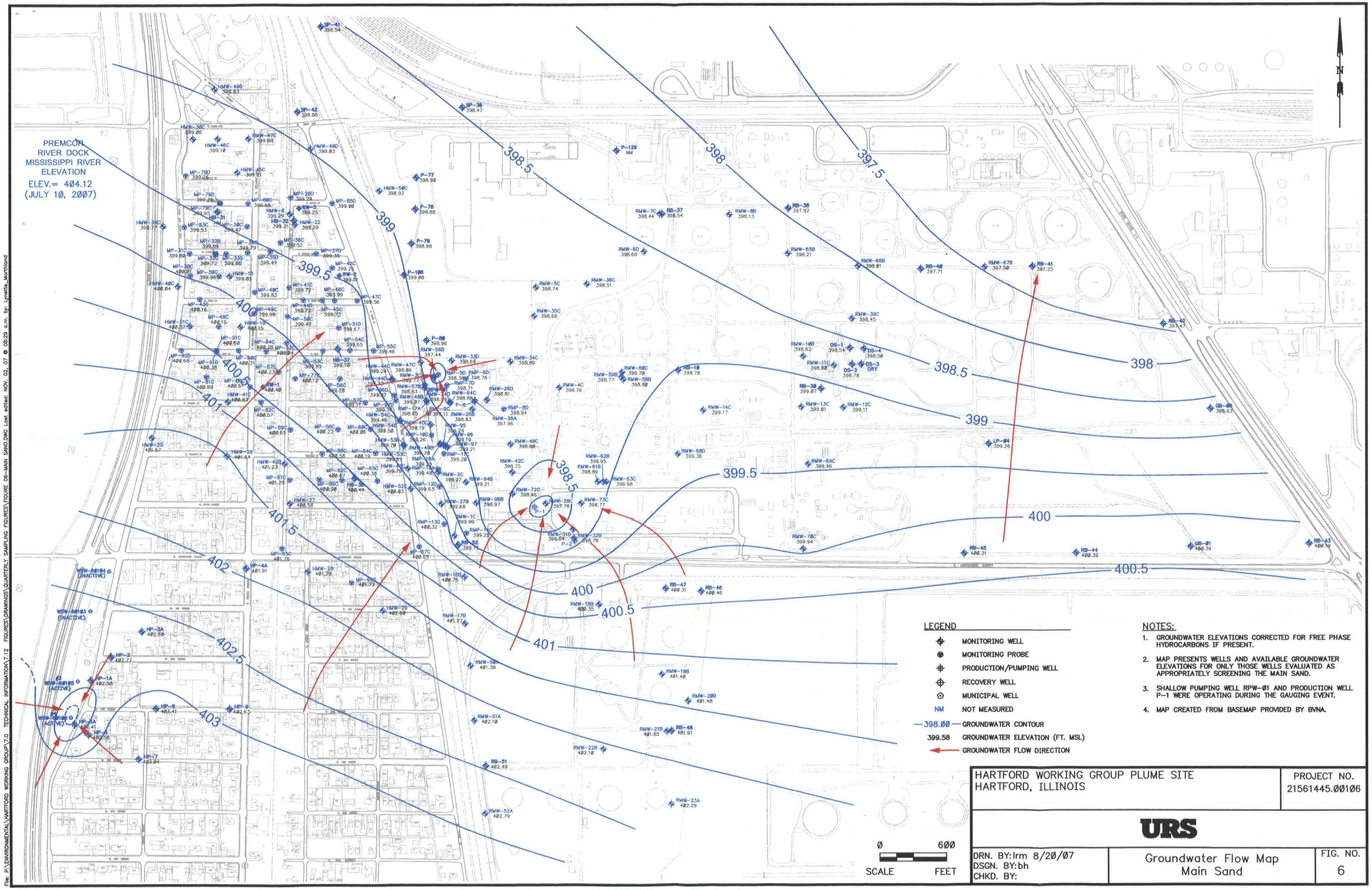
- MONITORING WELL
- MONITORING PROBE
- PRODUCTION/PUMPING WELL
- —399.00— GROUNDWATER CONTOUR CONTOUR INTERVAL = 0.5 FT.
- GROUNDWATER FLOW DIRECTION
- 399.99 GROUNDWATER ELEVATION (FT. MSL)
- NM NOT MEASURED
- INTERPRETED EXTENT OF EPA STRATUM (DASHED WHERE EXTRAPOLATED)

NOTES:

1. GROUNDWATER ELEVATIONS CORRECTED FOR FREE PHASE HYDROCARBONS IF PRESENT.
2. MAP PRESENTS WELLS AND AVAILABLE GROUNDWATER ELEVATIONS FOR SELECT WELLS IN THE UPPER MAIN SAND AND THOSE WELLS SCREENING THE EPA STRATUM.
3. SHALLOW PUMPING WELL RPW-01 AND PRODUCTION WELL P-1 WERE OPERATING DURING THE GAUGING EVENT.
4. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS	PROJECT NO. 21561445.00106
URS	
DRN. BY: lrm 8/20/07 DSGN. BY: bh CHKD. BY:	Groundwater Flow Map Combined EPA and Shallow Main Sand Strata
	FIG. NO. 5

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 05-COMBINED EPA-HAND-DRAWN CONTOURS.DWG Last edited: NOV. 02, 07 @ 08:19 a.m. by: Lynette_Northlond



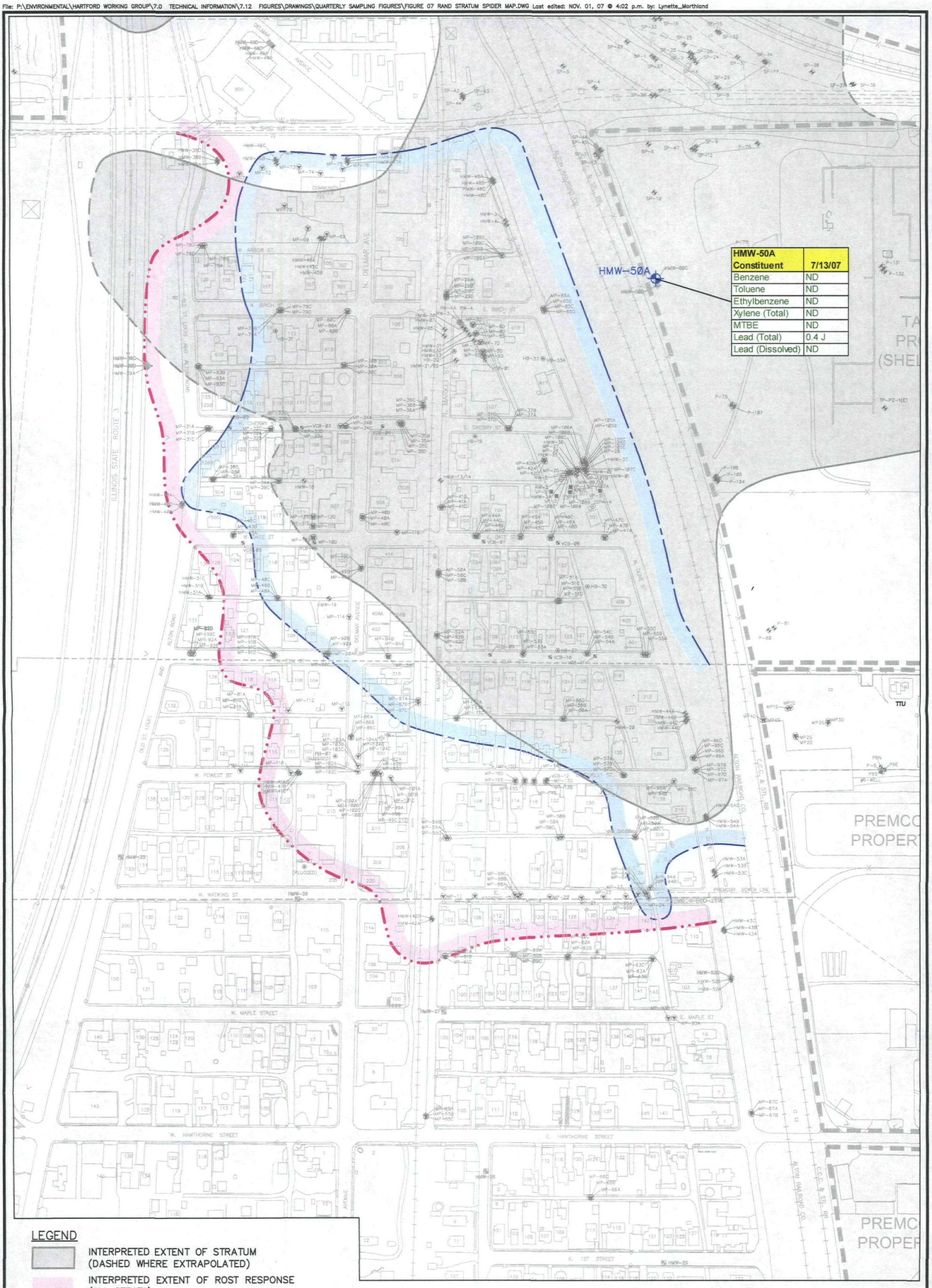
NOTES:

1. GROUNDWATER ELEVATIONS CORRECTED FOR FREE PHASE HYDROCARBONS IF PRESENT.
2. MAP PRESENTS WELLS AND AVAILABLE GROUNDWATER ELEVATIONS FOR ONLY THOSE WELLS EVALUATED AS APPROPRIATELY SCREENING THE MAIN SAND.
3. SHALLOW PUMPING WELL RPW-01 AND PRODUCTION WELL P-1 WERE OPERATING DURING THE GAUGING EVENT.
4. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS	PROJECT NO. 21561445.00106
URS	
DRN. BY: lrm 8/20/07 DSGN. BY: bh CHKD. BY:	Groundwater Flow Map Main Sand
	FIG. NO. 6

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 06-MAIN SAND.DWG Last edited: NOV. 02, 07 @ 08:29 a.m. by: Lynette_Northland

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 07 RAND STRATUM SPIDER MAP.DWG Last edited: NOV. 01, 07 @ 4:02 p.m. by: Lynette_Morthland



HMW-50A Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	0.4 J
Lead (Dissolved)	ND

LEGEND

- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA)
- INTERPRETED EXTENT OF FREE PRODUCT OBSERVED IN MONITORING WELLS (ALL STRATA)
- MONITORING WELL

NOTE:

1. RESULTS FOR ALL CONSTITUENTS IN ug/L.
2. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 200
SCALE FEET

N

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.00106

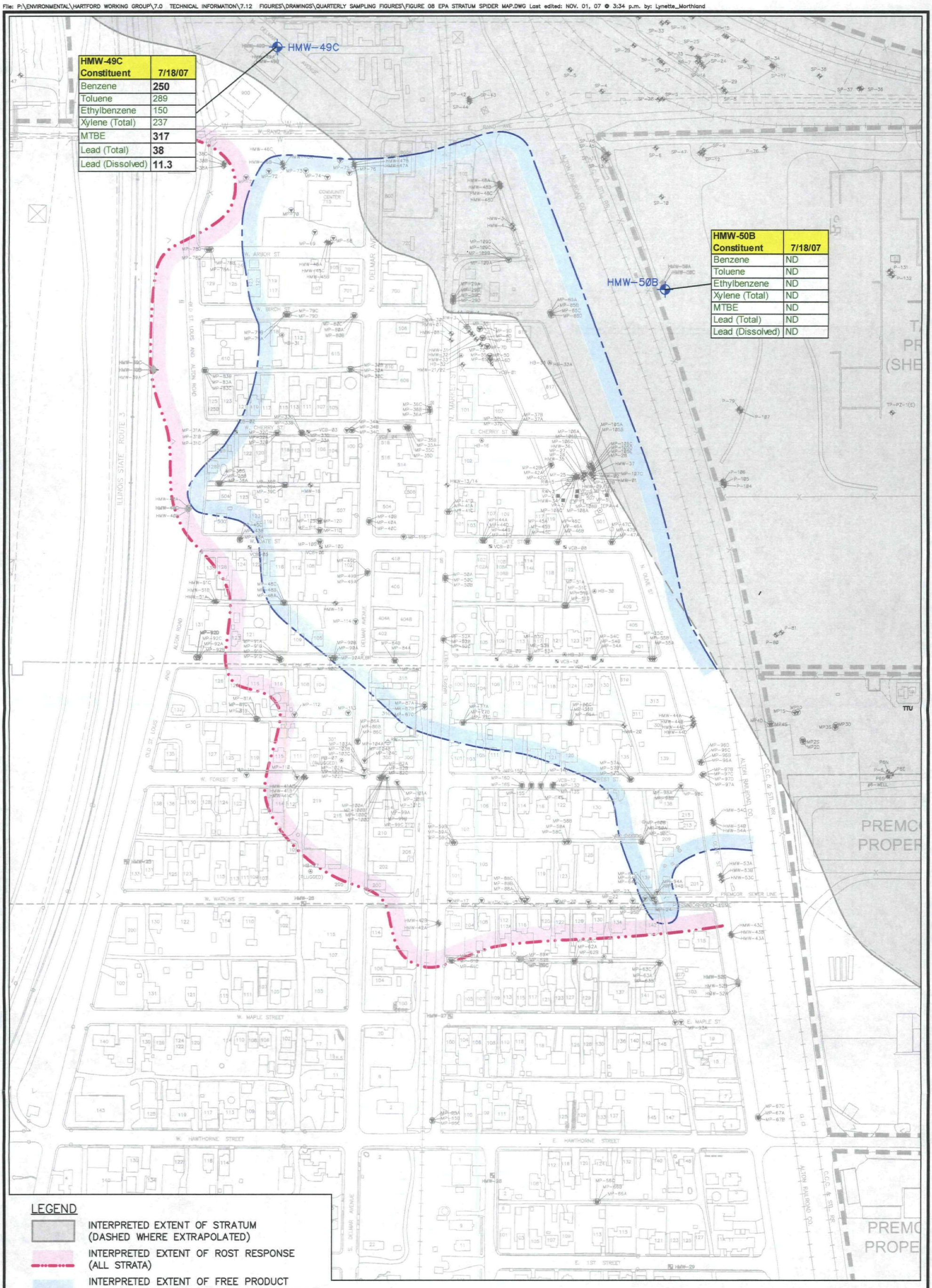
URS

DRN. BY:lrm 9/14/07
DSGN. BY:bh
CHKD. BY:

Groundwater Analytical Results
Rand Stratum

FIG. NO. 7

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 08 EPA STRATUM SPIDER MAP.DWG Last edited: NOV. 01, 07 @ 3:34 p.m. by: Lynette_Morthland



HMW-49C Constituent	7/18/07
Benzene	250
Toluene	289
Ethylbenzene	150
Xylene (Total)	237
MTBE	317
Lead (Total)	38
Lead (Dissolved)	11.3

HMW-50B Constituent	7/18/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

LEGEND

- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA)
- INTERPRETED EXTENT OF FREE PRODUCT OBSERVED IN MONITORING WELLS (ALL STRATA)
- MONITORING WELL

NOTE:

1. CONCENTRATIONS IN BLACK INDICATE THE RESULT EXCEEDS RESPECTIVE TACO CLASS I COMPARISON VALUES.
2. RESULTS FOR ALL CONSTITUENTS IN ug/L.
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 200 SCALE FEET

N

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.00106

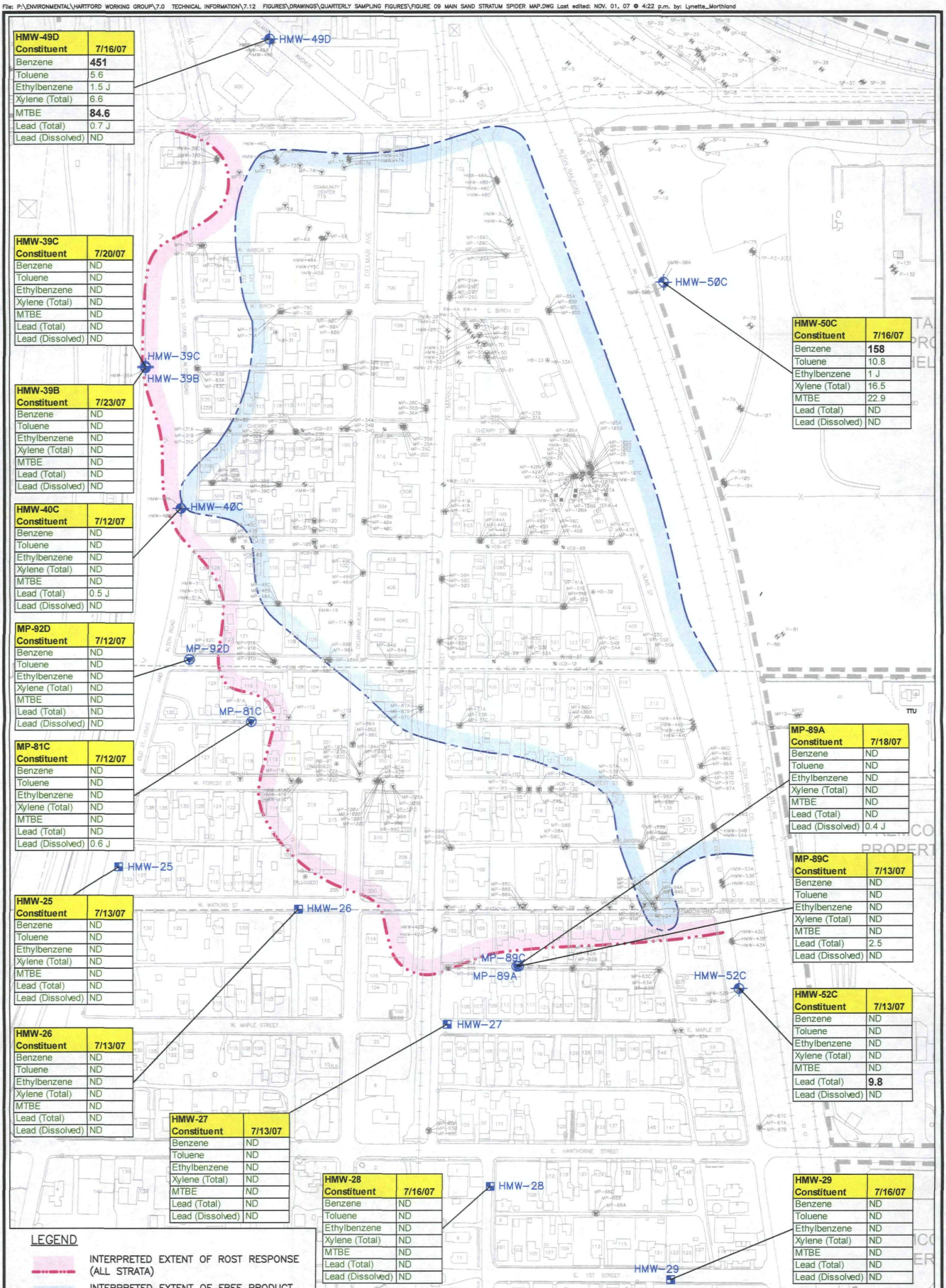
URS

DRN. BY:lrm 9/14/07
DSGN. BY:bh
CHKD. BY:

Groundwater Analytical Results
EPA Stratum

FIG. NO. 8

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE 09 MAIN SAND STRATUM SPIDER MAP.DWG Last edited: NOV. 01, 07 @ 4:22 p.m. by: Lynette_Morthland



HMW-49D Constituent	7/16/07
Benzene	**451**
Toluene	5.6
Ethylbenzene	1.5 J
Xylene (Total)	6.6
MTBE	**84.6**
Lead (Total)	0.7 J
Lead (Dissolved)	ND

HMW-39C Constituent	7/20/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-39B Constituent	7/23/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-40C Constituent	7/12/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	0.5 J
Lead (Dissolved)	ND

MP-92D Constituent	7/12/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

MP-81C Constituent	7/12/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	0.6 J

HMW-25 Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-26 Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-27 Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-28 Constituent	7/16/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

HMW-50C Constituent	7/16/07
Benzene	**158**
Toluene	10.8
Ethylbenzene	1 J
Xylene (Total)	16.5
MTBE	22.9
Lead (Total)	ND
Lead (Dissolved)	ND

MP-89A Constituent	7/18/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	0.4 J

MP-89C Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	2.5
Lead (Dissolved)	ND

HMW-52C Constituent	7/13/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	**9.8**
Lead (Dissolved)	ND

HMW-29 Constituent	7/16/07
Benzene	ND
Toluene	ND
Ethylbenzene	ND
Xylene (Total)	ND
MTBE	ND
Lead (Total)	ND
Lead (Dissolved)	ND

LEGEND

- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA)
- INTERPRETED EXTENT OF FREE PRODUCT OBSERVED IN MONITORING WELLS (ALL STRATA)
- MONITORING WELL
- SENTINEL MONITORING WELL
- SOIL VAPOR SAMPLING POINTS

NOTE:

1. CONCENTRATIONS IN BLACK INDICATE THE RESULT EXCEEDS RESPECTIVE TACO CLASS I COMPARISON VALUES.
2. RESULTS FOR ALL CONSTITUENTS IN ug/L.
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 200
SCALE FEET

N

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.00106

URS

DRN. BY:lrm 9/14/07
DSGN. BY:bh
CHKD. BY:

Groundwater Analytical Results
Main Sand Stratum

FIG. NO. 9

APPENDIX A Monitoring Well Inspection Report

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG Quarterly gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF / KK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HB-33				2"	PVC	No	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	
HMW-21				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	*
HMW-22				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	*
HB-32				4"	PVC	N	Y	-	-	-	-	-	-	-	Y	Y	N	N	Y	Y	N	-
HMW-33				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	N	*
HMW-32				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	N	*
HMW-31				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	N	*
HMW-30				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	N	*
RW-4				4"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	*
RW-4A				4"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	*
RW-3				4"	PVC	Y	Y	-	-	-	-	-	-	-	Y	Y	N	N	Y	Y	N	-
MP-9S				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	-
MP-9D				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	-

ADDITIONAL COMMENTS: * Bolts missing or defective

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG - Quality Gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF, RK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-8S				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	-
MP-8D				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	Y	N	*
MP-5S				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	N	Y	N	-
MP-5D				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	N	Y	N	*
MP-7S				1"	PVC	N	N	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	N	N	++
MP-7D				1"	PVC	N	N	Y	Y	N	Y	Y	N	N	Y	Y	Y	N	Y	N	N	++
HMW-07				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	N	-
HMW-08				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	Y	*
MP-29A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-
MP-29B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-
MP-29C				2"	PVC	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	-
MP-29D				2"	PVC	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	Y	*
MP-6S																						
MP-6D																						

ADDITIONAL COMMENTS: * Bolts missing or defective
++ Not marked

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG Quality Gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF/RK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-85A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
MP-85B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
MP-85C				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
MP-85D				2"	PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	–
HMW-4				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	N	–	–	–	N	Y	N	–
HMW-3				2"	PVC	N	Y	Y	Y	N	Y	Y	N	N	N	–	–	–	N	Y	N	–
HMW-48A				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	Y	*
HMW-48B				2	PVC	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	*
HMW-48C				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
HMW-48D				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
HMW-49A				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	~~N~~	~~Y~~	~~N~~	~~N~~	N	Y	Y	*
HMW-49B				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	~~N~~	~~Y~~	N	N	N	Y	Y	*
HMW-49C				2"	PVC	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	–
HMW-49D				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	N	–

≈ 11:00

ADDITIONAL COMMENTS: * Bolts stripped or defective

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HMG Quality Gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF, RK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-38A				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	–
HMW-39B				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	–
HMW-39C				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	–
MP-71				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	–
MP-72				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
HMW-46A				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
HMW-46B				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
HMW-46C				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	–
MP-73				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	–
MP-74				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	–
MP-75				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	*
MP-76				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
HMW-47A				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
HMW-47B				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	–

ADDITIONAL COMMENTS: * Bolts missing or defective

HMW-47C 2" PVC N Y Y Y N Y Y N Y Y Y N N N Y Y –

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG - Quality Gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF, RK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-47C				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	-
MP-70				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
MP-69				1"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	-
HMW-45A				2"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	-
HMW-45B				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-
HMW-45C				2"	PVC	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	*
MP-68				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG Quality Gauging
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: BF, RK

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-78A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
MP-78B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
MP-78C				2"	PVC	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	-
MP-78D				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	*
MP-79A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-
MP-79B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	Y	-
MP-79C				2"	PVC	N	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	*
MP-79D				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	-
MP-80A				1"	PVC	N	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	-
MP-80B				1"	PVC	N	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	-
MP-80C				2"	PVC	Y	Y	Y	Y	N	Y	Y	Y	N	Y	Y	N	N	N	Y	Y	-
MP-30A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
MP-30B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
MP-30C				2"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	-

ADDITIONAL COMMENTS: * Bolts missing or defective

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: _____ Date(s) of Inspection: _____

Project No.: Field Personnel:

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-83A				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	N	*
MP-83B				1"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	N	*
MP-83C				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	-
HMW-39A				2"	PVC	Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
HMW-39B				2"	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	*
HMW-39C				2"	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	N	Y	Y	*

ADDITIONAL COMMENTS: * Bolts missing or defective

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: AWO
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: NM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-44A						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
HMW-44B						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	
HMW-44C						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	
MP 55A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP 55B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP55C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-20						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-56A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-56B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-56C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-77A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-77B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-77C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-52-A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: NM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-52B						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
MP-52C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-54A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-54B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-54C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HB-37						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-53A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-53B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-53C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HB-30						↓	↓	↓	↓	↓	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MP-51A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-51B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-51C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-51D						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: NM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-50A						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
MP-50B						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	↓
MP-50C																						Y
MP-44A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	N
MP-44B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-44C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-45A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-45B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-45C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-46A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-46B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-46C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-47A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-47B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

ADDITIONAL COMMENTS: MP50C - could not locate

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: AWB
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: MH, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-47C						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
IEPA-4						NA	N	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	Y	Y	N	Y
MP42-A						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
MP-42B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-42C						Y	N	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y
HMW-39						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	Y	Y	Y	N	Y
MP-25	0					Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	N
MP-108A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-108B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-108C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-35						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-26						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HMW-36						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-27						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

ADDITIONAL COMMENTS: IEPA-4 - well cap removed ; MP-42-C - well cap removed, standing water in vault
HMW-34- concrete is loose in hole

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: #W6 Date(s) of Inspection: 7/10/07
Project No.: 21561445 Field Personnel: NM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-107 A	0					Y	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N
MP-107B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
MP-107C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HMW-01						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	
HMW-37						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-28						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP106 A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP106 B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP106C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
RW-2						N	Y	NA	NA	NA	NA	NA	NA	NA	N	NA	NA	NA	Y	Y	N	Y
RW-5						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	N
HMW-02						N	Y	N	NA	NA	Y	Y	N	Y	N	NA	NA	NA	N	Y	N	Y
MP105A						Y	Y	Y	Y	N	Y	Y	N	Y	N	NA	NA	NA	N	N	N	Y
MP-105B						Y	Y	Y	Y	N	Y	Y	N	Y	N	NA	NA	NA	N	N	N	N

ADDITIONAL COMMENTS: RW-2 is skimmer pump open to atmosphere; HMW-02 - Flush mount lid broken
MP-105A - Flush mount loose in ground

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HW6
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: NM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-105C								Y	Y	N	Y	Y	N	Y	N	NA	NA	NA	N	N	N	N
MP-105D								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-105E								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HMW-9								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HMW-10								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-41A								Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	
MP-41B								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-41C								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HMW-13								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
HMW-14								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP37A								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	N	↓	↓	
MP-37B								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-37C								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	
MP-37D								↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG
Project No.: 21561445
Date(s) of Inspection: 7/10/07
Field Personnel: JM, RW

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HB-16						N	Y	N	NA	NA	N	NA	NA	NA	N	NA	NA	NA	NA	NA	NA	N
	0																					

ADDITIONAL COMMENTS:

0

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG
Project No.: 21561445
Date(s) of Inspection: 7/11/07
Field Personnel: NM, BH

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-28						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y (1)
MP-66A						↓	↓	↓	↓	↓	↓	↓	↓	↓	N	NA	NA	NA	↓	↓	↓	Y (1)
MP-66B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Y (1)
MP-66C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	N
HMW-29						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-01A						↓	↓	↓	↓	↓	↓	↓	↓	↓	Y	Y	N	N	↓	↓	↓	↓
HP-01B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-01C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-02A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-3A	0					↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-3B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-3C						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-05A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
HP-05B						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

ADDITIONAL COMMENTS: 1) Stripped/Broken flush mount ears

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG
Project No.: 21561445
Date(s) of Inspection: 7/11/07
Field Personnel: NM, BH

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HP-05C						Y	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	Y	Y	N	Y (1)
HP-06A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Y (1)
HP-07A	0					↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	N
HP-08A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Y (1)
HP-09A						↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	Y (1)

ADDITIONAL COMMENTS: 1) Stripped / Broken Flush Mount Ears

0

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: Village of Hartford
Project No.:
Date(s) of Inspection: 10 July 2007
Field Personnel: N McWurlen / S. Bardsley

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Protective Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP35A		9.02		8																	X	I
35B		Dry@	17.07	8																	X	I
35C		25.32		8																	X	I
35D	30.51	32.40		8		X															X	I
MP36A		Dry@12.62		8																	X	I
36B		25.35		8										NO							X	I
36C	32.32	32.99		12																	X	I
MP33A		Dry@	9.63	8																	X	I
33B		14.21		12																	X	I
33C		Dry@	25.91	12																	X	I
33D		30.43		8																	X	I
MP34A		15.70		8																		I
B		Dry@	24.35	8																		I
C	30.70	32.40		Box																		I

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name:
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP 32 A		Dry@	14.07	12										NO							X	I
B	29.67	30.32		12										NO							X	I
C	~~[illegible]~~	30.00		8										NO							X	I
MP31 A		Dry@	9.70	12										NO							X	G
MP 31 B		15.46		8																	X	clean
MP 31 C		27.18		8																	X	G
HMW 18	31.58	32.20		8		X															X	I
MP 39 A		32.90		12										No							X	I
B		20.00		12										NO							X	I
C	31.73	33.40		8		X															X	I
MP 38 A		Dry@	12.00	8																	X	I
B		Dry@	23.24	8																	X	I
C		26.90		8		X															X	I

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name:
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW 40 A		12.98		8																	X	clean
B		24.29		8																	X	clean
C		24.97		8																	X	clean
MP 43 A		Dry@	8.39	12										NO							X	I
B		Dry@	17.46	12										NO							X	I
C	26.02	26.93		8																	X	I
MP 10 S		9.95		4																		I
D		19.40		4										~~NO~~								I
MP 11 S		Dry@	9.70	4																		I
D		19.89		4																		I
MP 12 S		Dry@	9.87	4																		I
D		20.19		4																		I

ADDITIONAL COMMENTS: A) Trool in HMW 40 C

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: _____ Date(s) of Inspection: 7/10/07

Project No.: _____ Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP 40 A		Dry@	11.00	12										NO							X	clean
B		29.47		12										NO							X	G
C		31.21		8																	X	G
MP 49 A		Dry@	11:00	12										NO							X	I
B		22.69		12										NO							X	I
C	30.77	32.14		8																	X	I
HMW 19	31.55	32.00		8										NO								I
MP 48 A		Dry@	18.74	Box																		I
B	28.55	29.56		Box																		I
C	29.00	30.12		8																		I
HMW51 A		Dry@	13.65	8																	X	G
B		24.73		8										NO							X	G
C		25.05		8																	X	clean

ADDITIONAL COMMENTS: _____

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name:
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP92 C		19.83		12										NO							X	I
D		27.30		12										NO								Clean
MP91 B		Dry@	14.49	12										NO							Y	I
C	25.32	25.60		8										NO							X	I
D		25.60		12		X								NO							X	I
MP 90 B		Dry@	15.93	12										NO							X	I
C	29.20	31.10		12		X								NO								I
MP 84 A		8.52		12										NO							X	I
B		Dry@	25.63	12										NO							X	I
C	31.70	32.32		8																	X	I
MP 87 A		Dry@	6.60	12										NO							X	I
B		25.50		12										NO							Y	I
C	31.55	32.86		12										NO							X	I

ADDITIONAL COMMENTS: MP91C Pipe is cut @ ~~And~~ 45° AND cap Dosent seat well

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name:
Project No.:
Date(s) of Inspection: 7/19/07
Field Personnel: MC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
RW-1		33.35		3'										NO								I
MP-101 A		6.96		12										NO							X	I
B		Dry @	13.98	12										NO							X	I
C	30.78	30.99		12										NO							X	I
MP99 A		Dry @	6.82	12										NO							X	I
B		13.25		12										NO							X	I
C	31.04	31.05		12										NO							X	I
MP 100 A		Dry @	4.18	8																		I
B																						I
C																						I
D																						I
Not Found MP-82 A																						I
B																						I
C	31.00	31.09																				I

ADDITIONAL COMMENTS: 1) RW-1 - Lock on gate around well is Bent will not Lock need to replace

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name:
Project No.:
Date(s) of Inspection: 7/10/07
Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP 102 A		7.51		12										NO							X	I
B		14.70		12																	X	
C		30.40		12																	X	
MP 103 A		Dry @	8.81	12																		
B		14.58		12																		
C		30.60		12																		
MP 104 A		7.56		12																	X	
B		14.36		12																	X	
C		30.67		12										NO							X	I
MR 86 A		Dry @	7.40	8										NO							X	I
B		26.65		8										NO							X	I
C	30.66	30.81		8										NO							X	I

ADDITIONAL COMMENTS:

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EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: _____ Date(s) of Inspection: 7/10/07

Project No.: _____ Field Personnel: NC SB

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MR 81 A		Dry@	7.70	12										NO							X	Clean
B		Dry@	18.75	12										NO							X	Clean
C		24.51		8										NO							X	clean
HMW 41 A		19.89		8																	X	Clean
B		24.32		8										NO							X	G
C	0	25.02		8																	X	Clean
HMW 25		25.88				X															NO	Clean
HMW 26		23.66		12		X															X	Clean

ADDITIONAL COMMENTS: _____

0

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG-Quarterly Sampling
Project No.: 21561445.00164
Date(s) of Inspection: 7-10-07
Field Personnel: B. Higgins, J. Humpes

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-54A				2	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	yes
HMW-54B				4	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
HMW-54C				2	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-97A				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-97B				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	N	yes
MP-97C				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	N	yes
MP-97D				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	N	yes
MP-96A				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-96B				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-96C				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-96D				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-98-A				1	PVC	"	"	Y	N	Y	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-98-B				1	PVC	"	"	Y	N	Y	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-98-C				1	PVC	"	"	Y	N	Y	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes

ADDITIONAL COMMENTS: HMW-54A,B,C - Bolts are too short, no locks / MP-97A,B,C,D - no locks / MP-97C,D - loose caps / MP-96A,B,C,D - no locks / MP-96B - not tight / MP-98A,B,C - ear cracked of protective covering

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: LWG - Quarterly Sampling
Project No.: 21561445.00104
Date(s) of Inspection: 7-10-07
Field Personnel: B. Higgins, J. Munyan

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-57A				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-57B				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-57C				2	PVC	No	Yes	Y	N	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-13S				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-13D				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-14S				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	N	yes
MP-14D				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	N	yes
MP-15S	-No locks, loose bolts, loose caps			1	PVC	No	Yes	Y	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N	yes
MP-15D	-under gravel			1	PVC	No	Yes	Y	N	N	Y	Y	N	N	Y	Y	N	Y	N	N	N	yes
MP-16S				1	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	No	no
MP-16D				1	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	No	no
MP-60A				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-60B				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-60C	-Bolts do not tighten			2	PVC	Yes	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes

ADDITIONAL COMMENTS: MP-57C-ear cracked of protective covering / MP-13S,D-Loose protective covering, missing 1 bolt on 13S, well caps loose / MP 14S,D-Bolts too short, well caps ~~[illegible]~~ not tight, protective covering not tight

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWB-Quarterly Sampling
Project No.: 21561445.00104
Date(s) of Inspection: 7-10-07
Field Personnel: B. Higgins, J. Mulper

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-58A	-loose bolts			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-58B	-loose bolts			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-58C				2	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-59A	-caps not tight			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-59B	-caps not tight			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-59C				2	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-88A	-loose bolts			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-88B	-loose bolts			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-88C	-loose bolts			2	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-95A	0			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-95B				1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-64A	-loose bolts			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-64B	"			1	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-64C	"			2	PVC	No	yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG - Quarterly Sampling
Project No.: 215614445.0010

Date(s) of Inspection: 7-10-07
Field Personnel: B. Higgins, J. Wampler

WELL INTEGRITY INFORMATION

Well ID	Static Levels: Depth to Product (FT BTOC)	Static Levels: Depth to Water (FT BTOC)	Static Levels: Total Well Depth (FT BTOC)	Well Casing: Diameter (Inches)	Well Casing: Material	Security: Well Secured/Locked	Security: Well Cap Present	Protective Cover: Present	Protective Cover: Intact	Protective Cover: Dented	Flush Mount: Present	Flush Mount: Intact	Flush Mount: Cracked	Flush Mount: Rubber Seal Present	Concrete Pad: Present	Concrete Pad: Intact	Concrete Pad: Cracked	Concrete Pad: Shifted Out of Place	Grade/Slope: Away from Well	Grade/Slope: Facilitates Access	Grade/Slope: Standing Water	Additional Comments Below
MP-94A	-broken seal on well cap			1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-94B	-broken seal on well cap			1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-53A	-loose bolts			2	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	yes
MP-53B	-loose bolts			4	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-53C	-loose bolts			2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-43A				2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-43B				2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-43C	-transducers present			2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	X	yes
MP-52A	-loose bolts			2	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	yes
MP-52B	- "	"		2	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	yes
MP-52C	- "	"		2	PVC	Yes	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	yes
MP-93A				1	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	no
MP-93B				1	PVC	No	Yes	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	N	no

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG-Quarterly Sampling
Project No.: 21561445.00104
Date(s) of Inspection: 7-10-07
Field Personnel: B Higgins, J. Mayfer

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
MP-63A				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-63B				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-63C	-ear busted-no bolts			2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
HB-38	-partially stick-up (behind tan garage)			2	PVC	No	Yes	N	Na	Na	Y	N	N	Na	N	Na	Na	Na	ok	ok	N	yes
MP-62A				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-62B				1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-62C				2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-89A	-loose bolts			1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-89B	"	"		1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-89C	"	"		2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-61A	-loose bolts			1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-61B	"	"		1	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-61C	-loose bolts -missing ear			2	PVC	No	Yes	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes

ADDITIONAL COMMENTS:

EXISTING WELL INTEGRITY SURVEY FORM

PROJECT INFORMATION

Project Name: HWG - Quarterly Sampling
Project No.: 21561445.00104

Date(s) of Inspection: 7-10-07
Field Personnel: B. Higgins, J. Mapes

WELL INTEGRITY INFORMATION

Well ID	Static Levels			Well Casing		Security		Protective Cover			Flush Mount				Concrete Pad				Grade/Slope			Additional Comments Below
	Depth to Product (FT BTOC)	Depth to Water (FT BTOC)	Total Well Depth (FT BTOC)	Diameter (Inches)	Material	Well Secured/Locked	Well Cap Present	Present	Intact	Dented	Present	Intact	Cracked	Rubber Seal Present	Present	Intact	Cracked	Shifted Out of Place	Away from Well	Facilitates Access	Standing Water	
HMW-42A				2	PVC	N	Y	Y	Y	N	Y	Y	N	Y	Y	Y	N	N	ok	ok	Y	no
~~HMW~~-42B				2	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
HMW-87	-loose bolts -dedicated pump			2	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	no	yes
MP-65A	-loose	bolts		1	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-65B	"	"		1	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-65C	-transducer			2	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	yes
MP-67A				1	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-67B				1	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
MP-67C				2	PVC	N	Y	Y	Y	N	Y	Y	N	N	Y	Y	N	N	ok	ok	Y	no
	0																					

ADDITIONAL COMMENTS:

APPENDIXB

D. Discussion and Calculation

Appendix B: D_o Discussion and Calculation

The following information was provided on behalf of Mr. Andrew Kirkman, of The RETEC Group, Inc., on November 7, 2005.

The fluid characteristics that influence LNAPL distribution and recoverability from the subsurface include the following:

- LNAPL Density
- LNAPL Viscosity
- LNAPL and Water Interfacial tensions

In addition, the soil type can have a large influence on LNAPL distribution and recoverability from the subsurface. Soil characteristics that effect the distribution and presence of LNAPL in the subsurface include:

- Porosity
- Intrinsic permeability
- Pore size distribution
- Soil grain shape

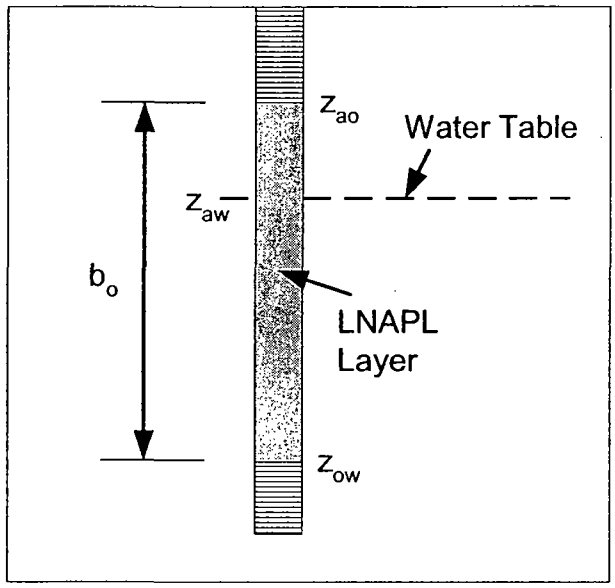
Accounting for these parameters is necessary in order to accurately assess the distribution of LNAPL in the formation and estimate the true amount of LNAPL in the subsurface. Mapping of apparent LNAPL thicknesses measured in monitoring wells at a site with varying soil and LNAPL type is not an accurate depiction of LNAPL extent or magnitude. In order to provide an estimate of the actual LNAPL in the subsurface, the term "LNAPL specific thickness" is proposed to estimate the true amount of LNAPL in the formation.

Because of the variance in soil and LNAPL physical characteristics, the same LNAPL thickness measured at two locations does not always represent the same distribution of LNAPL in the formation or the recoverability of LNAPL. For instance, one foot of LNAPL measured in a well installed in clay will have a much smaller specific thickness than if it were installed in sand. The same is true in terms of saturation. The pore spaces in sand are more interconnected and generally larger in the sand. The clay, however, has smaller and less interconnected pores and a higher pressure is required to saturate those to the same saturation.

The following schematic (Charbeneau et al., 1999) shows a monitoring well with an LNAPL layer located between the air-NAPL interface z_{ao} and the NAPL-water interface z_{ow}. The total monitoring well LNAPL

thickness is b_o. The elevation of the water table, z_{aw}, provides the datum for fluid levels. While the water table is not measured in a monitoring well because of the LNAPL layer, its elevation is easily determined from the elevations z_{ao} and z_{ow}, and the LNAPL specific gravity.

Figure 1



D_o is defined as the specific thickness of LNAPL, which is representative of the amount of LNAPL in a formation. For example, if you had a core of soil separated into its respective media (i.e., air, water, LNAPL, and soil), D_o is a normalized volume of LNAPL ($feet^3/feet^2$) per unit surface area, but is expressed as a thickness (in units of feet). At equilibrium, due to capillary forces in soil, the measured LNAPL thickness in a monitoring well, b_o, is always greater than D_o.

The relationship between measured monitoring well LNAPL thickness, b_o, and the specific LNAPL volume, D_o (the volume of LNAPL per unit surface area) may be calculated from the following equation:

$$D_o(b_o) = \int_{z_{ow}}^{z_{max}} n S_o(z)\, dz$$

Where:

Z_{max} = height of oil

Z_{ow} = height of the oil/water interface

S_o = saturation of oil

n = soil porosity

Source: D_o Discussion and Calculation provided by BVNA

The function $D_o(b_o)$ may be approximated piecewise by a linear function of the form:

$$D_o = \beta (b_o - \chi)$$

The most accurate method to estimate LNAPL specific thickness is to collect soil core data, analyze Dean Stark LNAPL saturations and integrate LNAPL saturation over discrete depth intervals to calculate D_o (Adamski, et al, 2003). If LNAPL saturation and soil core data are available, D_o is calculated as follows:

$$D_o = \text{LNAPL \%} * \text{ porosity} * \text{soil core interval (ft.)}$$

Where:

LNAPL % = oil saturation (in % of pore volume)

porosity = site-specific total porosity (in %)

soil core interval = interval of LNAPL impacted core (in feet)

Collection of soil cores from varying soil types across a site and discrete sampling and analyses of LNAPL saturations accurately depicts the true amount of LNAPL in each formation and eliminates the need for correction factors based on buoyancy or LNAPL density. Correction factors based on soil type and LNAPL type will provide accurate estimations of LNAPL specific thickness across a site.

References

Adamski, M., V. Kremesec, R. Kolhatkar, C. Pearson, and B. Rowan, 2001. "LNAPL Saturation, Distribution, and Recovery in Fine Grained Soils," Proceedings of the Petroleum Hydrocarbons and Organic Chemicals in Ground Water Conference and Exposition, pp.178–192. November 14–16, 2001.

Charbeneau, R.J., R.T. Johns, L.W. Lake, and M.J. McAdams, 1999. "Free-Product Recovery of Petroleum Hydrocarbon Liquid." American Petroleum Institute, Publication No. 4682. Ground Water Monitoring & Remediation, 20(3), Summer, pp. 147-158, 2000. June 1999.

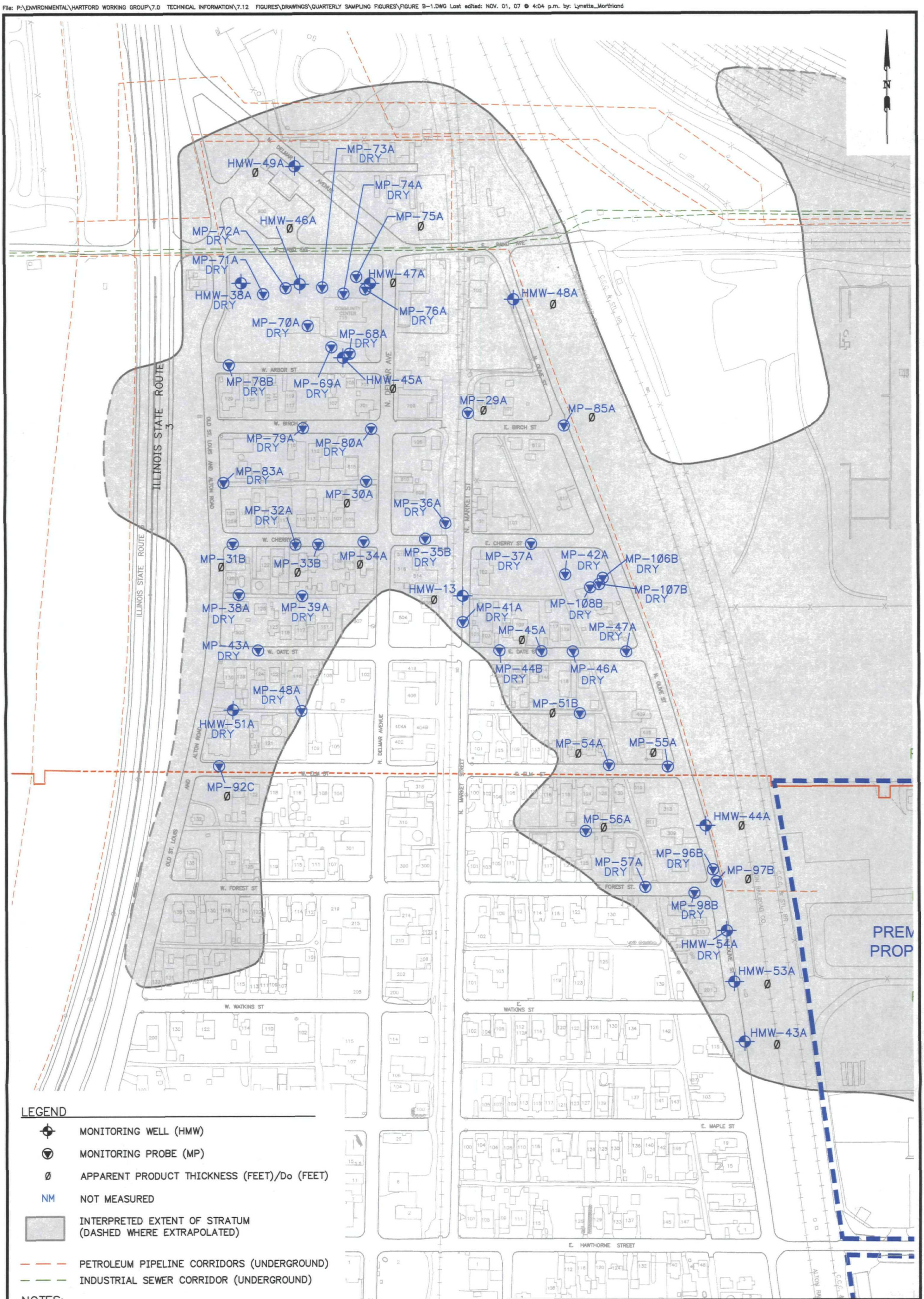
APPENDIXB

D_o Discussion and Calculation

B-1

LNAPL Specific Thickness (D_o)
July 10-11, 2007
North Olive Stratum

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE B-1.DWG Last edited: NOV. 01, 07 @ 4:04 p.m. by: Lynette_Morthland



LEGEND

- MONITORING WELL (HMW)
- MONITORING PROBE (MP)
- Ø APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM NOT MEASURED
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)

NOTES:

1. Do IS A NORMALIZED VOLUME OF LNAPL (FT^3/FT^2) PER UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
2. A "Ø" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "Ø".
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

Ø 200Ø
SCALE FEET

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.ØØ1Ø6

URS

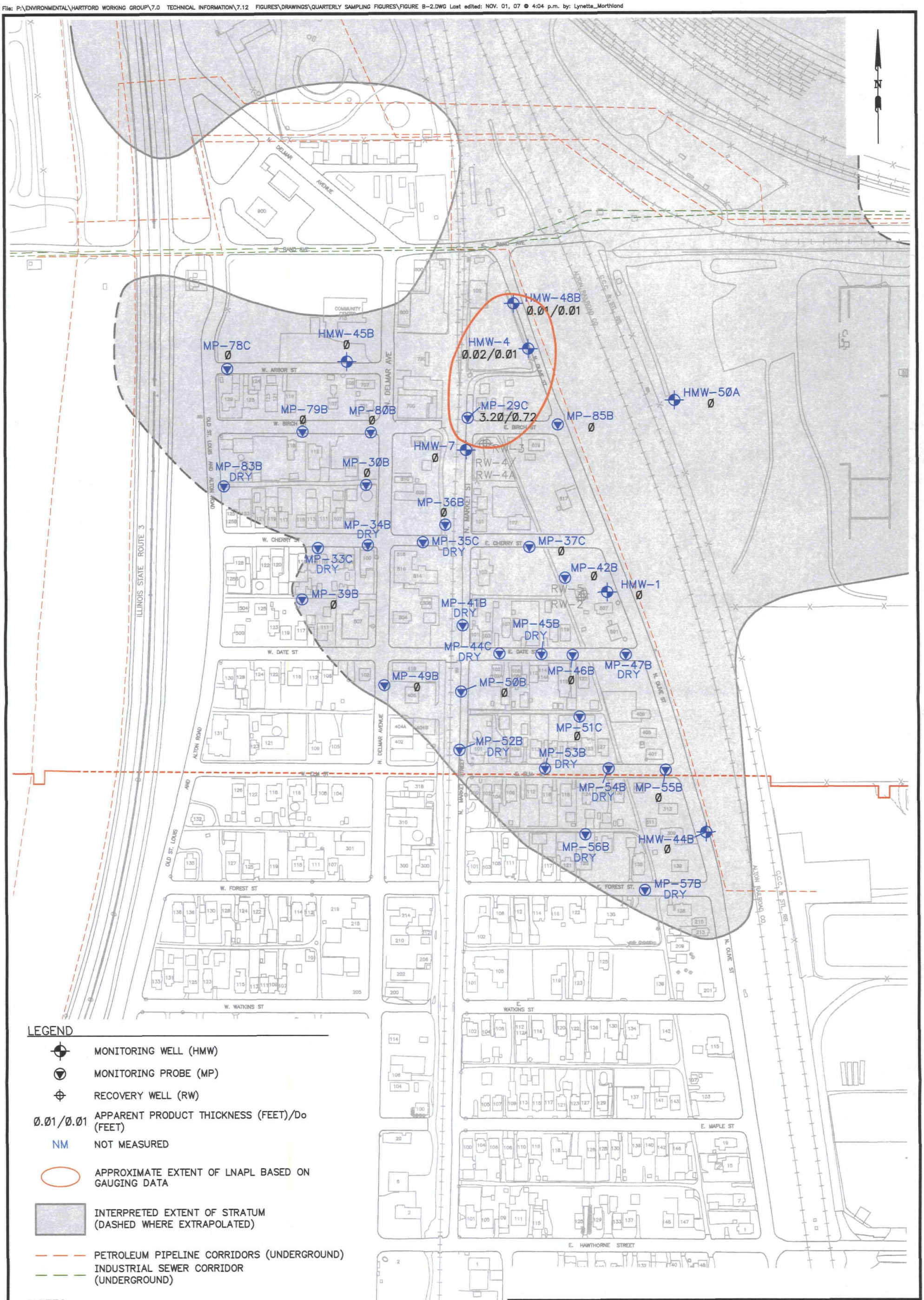
DRN. BY:lrm 9/13/Ø7
DSGN. BY:bh
CHKD. BY:

LNAPL Apparent/Specific Thickness North Olive Stratum

FIG. NO. B-1

B-2
LNAPL Specific Thickness (D_O)
July 10-11, 2007
Rand Stratum

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE B-2.DWG Last edited: NOV. 01, 07 @ 4:04 p.m. by: Lynette_Morthland



LEGEND

- MONITORING WELL (HMW)
- MONITORING PROBE (MP)
- RECOVERY WELL (RW)
- Ø.Ø1/Ø.Ø1 — APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM — NOT MEASURED
- APPROXIMATE EXTENT OF LNAPL BASED ON GAUGING DATA
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)

NOTES:

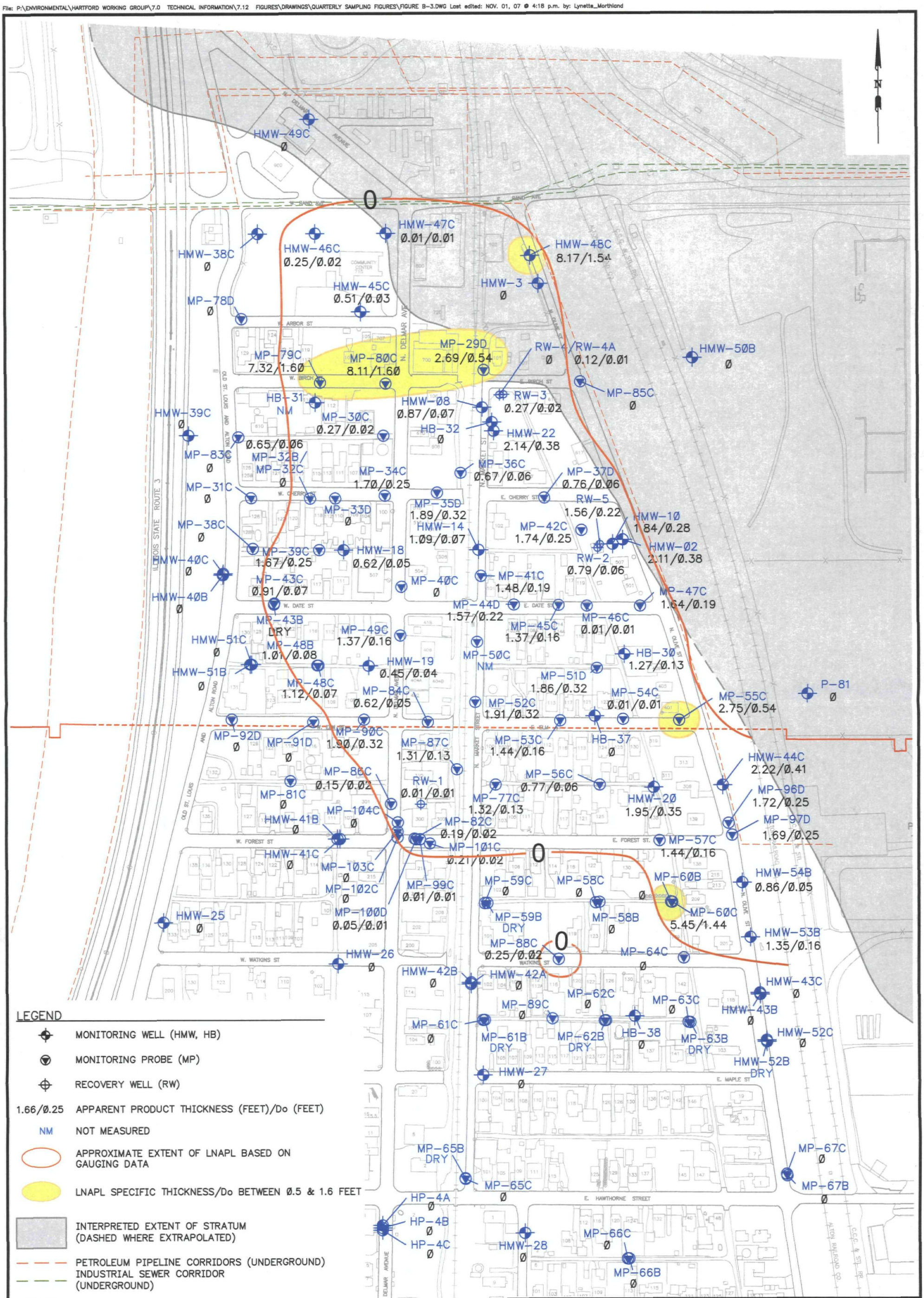
1. Do IS A NORMALIZED VOLUME OF LNAPL (FT^3/FT^2) PER UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
2. A "Ø" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "Ø".
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

Ø 2ØØ
SCALE FEET

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS	PROJECT NO. 21561445.ØØ1Ø6
URS	
DRN. BY:lrm 9/13/Ø7 DSGN. BY:bh CHKD. BY:	LNAPL Apparent/Specific Thickness Rand Stratum
	FIG. NO. B-2

B-3
LNAPL Specific Thickness (D_o)
July 10-11, 2007
Combined EPA and Shallow Main Sand Strata

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE B-3.DWG Last edited: NOV. 01, 07 @ 4:18 p.m. by: Lynette_Morthland



LEGEND

- MONITORING WELL (HMW, HB)
- MONITORING PROBE (MP)
- RECOVERY WELL (RW)
- 1.66/Ø.25 APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM NOT MEASURED
- APPROXIMATE EXTENT OF LNAPL BASED ON GAUGING DATA
- LNAPL SPECIFIC THICKNESS/Do BETWEEN Ø.5 & 1.6 FEET
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)

NOTES:

1. Do IS A NORMALIZED VOLUME OF LNAPL (FT^3/FT^2) PER UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
2. A "Ø" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "Ø".
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS		PROJECT NO. 21561445.ØØ1Ø6
URS		
DRN. BY:lrm 9/13/Ø7 DSGN. BY:bh CHKD. BY:	LNAPL Apparent/Specific Thickness Combined EPA Stratum and Shallow Main Sand	FIG. NO. B-3

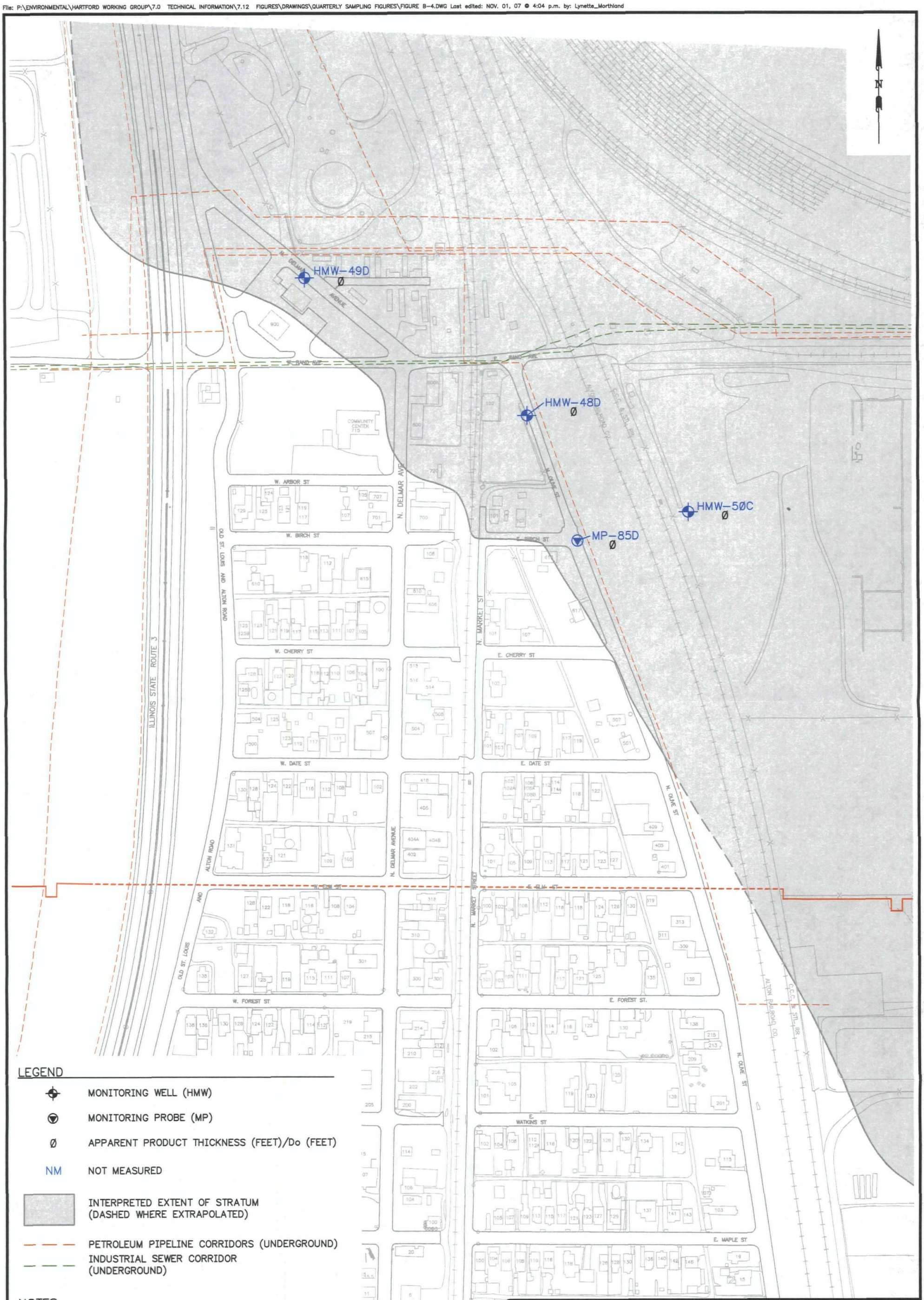
B-4

LNAPL Specific Thickness (D_o)

July 10-11, 2007

Main Sand Below the D Clay

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE B-4.DWG Last edited: NOV. 01, 07 @ 4:04 p.m. by: Lynette_Morthland



LEGEND

- MONITORING WELL (HMW)
- MONITORING PROBE (MP)
- Ø APPARENT PRODUCT THICKNESS (FEET)/Do (FEET)
- NM NOT MEASURED
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- PETROLEUM PIPELINE CORRIDORS (UNDERGROUND)
- INDUSTRIAL SEWER CORRIDOR (UNDERGROUND)

NOTES:

1. Do IS A NORMALIZED VOLUME OF LNAPL (FT^3/FT^2) PER UNIT SURFACE AREA, BUT IS EXPRESSED AS A THICKNESS (IN UNITS OF FEET).
2. A "Ø" AT A MONITORING LOCATION INDICATES THERE WAS NO LNAPL GAUGED AT THE LOCATION AND, THEREFORE, Do ALSO EQUALS "Ø".
3. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

HARTFORD WORKING GROUP PLUME SITE HARTFORD, ILLINOIS		PROJECT NO. 21561445.ØØ1Ø6
URS		
DRN. BY:lrm 9/13/Ø7 DSGN. BY:bh CHKD. BY:	LNAPL Apparent/Specific Thickness Main Sand Below The D Clay	FIG. NO. B-4

APPENDIX C

URS Low Flow Sampling SOP

1. Objective

This document defines the standard operating procedure (SOP) and necessary equipment for collection of groundwater samples in monitoring wells, extraction wells, or piezometers using low-flow techniques. The term "Low Flow" refers to the velocity that the groundwater is removed from the soil formation immediately adjacent to the well screen.

In this technique, in order to withdraw water from within the well screen and to lessen drawdown, a pump that minimizes disturbance to the groundwater is operated at a low flow rate. The well is only purged within the screened interval until specific parameters have stabilized and as according to the site-specific work plan. Therefore, the groundwater samples collected are representative of the water bearing formation and hydraulically isolated from the water in the casing. The need to purge three well volumes, as required in traditional techniques, is not necessary with low flow purging and sampling. The low flow procedure described in this SOP is not necessarily applicable for every site or for wells screened in materials with very low permeability.

SOPs providing additional related guidance are listed below:

- SOP No. 4 – Decontamination
- SOP No. 8 – Field Reporting and Documentation.
- SOP No. 10 – Groundwater Level Measurements
- SOP No. 20 – Monitoring Well Development and Purging
- SOP No. 24 – Sample Classification, Packaging and Shipping
- SOP No. 25 – Sample Containers, Preservation, and Holding Times
- SOP No. 26 – Sample Control and Custody Procedures.

2. Equipment

Equipment potentially used during well purging and sampling:

- Well installation forms and boring logs for well being sampled
- Well keys
- Disposable latex or nitrile gloves
- Assorted tools (socket set, screwdriver, etc.)
- New synthetic rope

- Pump and required accessories (described in more detail in following section)
- Electronic water level indicator with 0.01-foot increments
- Graduated cylinder
- Temperature meter
- pH meter (with automatic temperature compensation)
- Conductivity meter
- Turbidity meter
- Dissolved oxygen (DO) meter
- Oxidation reduction potential (ORP) meter
- Flow-through cell
- Calibration fluids
- Paper towels or Kimwipes
- Calculator
- Bound field logbook (logbook)
- Waterproof pen and permanent marker
- Plastic buckets
- 55-gallon drums or truck-mounted tank
- Plastic sheeting
- Appropriate decontamination equipment (see SOP No. 4)
- Cooler with ice
- Sample containers and labels
- Groundwater sampling form
- Chain-of-Custody form
- Appropriate health and safety equipment (e.g., photoionization detector (PID)).

3. Sampling Procedure

This section provides the step-by-step procedure for collecting groundwater samples in the field. Observations made during groundwater purging and sampling should be recorded in a logbook in accordance with procedures described in SOP No. 8.

A. Any equipment used in the sampling procedure that could contact groundwater should be properly decontaminated before each use (see SOP No.4).

B. Equipment should be calibrated based on the manufacturers' instructions. The frequency of calibration should be specified in the site-specific Field Sampling Plan (FSP), Quality Assurance Project Plan (QAPP) or work plan. According to "Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures" (Unites States Environmental Protection Agency (USEPA), 1996), pH calibration should be performed with at least two buffers that bracket the expected range of values. Dissolved oxygen calibration must be corrected for local barometric pressure readings and elevation.

C. Before well purging begins, the following steps should be performed at each well:

- Inspect the well and surrounding site for security, damage, and evidence of tampering. If damage or tampering is evident, contact the project manager for guidance.
- Place clean plastic sheeting around the well (as necessary)
- Measure ambient volatile organic compounds (VOCs) background levels in the immediate vicinity of the well (i.e., using a PID or a flame ionization detector (FID) per the Health and Safety Plan (HASP).
- Remove the well cap and immediately measure VOCs at the rim of the well and record the readings in the logbook or on the groundwater sampling form. Give the water in the well adequate time to reach equilibrium.

D. After the well has reached equilibrium, the groundwater elevation should be measured to the nearest 1/100-foot. The total well depth and screened interval should be obtained from the well logs. Measuring the total depth prior to sampling should be avoided to prevent resuspension of settled solids in the well casings and to minimize the necessary purge time for turbidity equilibration. The total depth of the well should be confirmed after sampling has been completed. A detailed description of monitoring well gauging activities is provided in SOP No. 10.

E. Following measurement of the static groundwater elevation, the appropriate equipment will be slowly and carefully placed in the well. If the wells have light or dense non-aqueous-phase liquids (LNAPLs or DNAPLs) care should be taken to place sampling equipment below or above the NAPL.

Selection of the proper pump is important for low-flow sampling activities. USEPA guidance (1996) notes that dedicated sampling devices capable of purging and sampling are preferred over any other type of device. In addition, the pump must be capable of flow rates between 0.1 and 1.0 liter per minute. A variety of portable sampling devices are available, such as bladder pumps, peristaltic pumps, electrical submersible pumps, gas-driven pumps, inertial lift foot-valve samplers (e.g. check-ball systems), and bailers (a list of pump manufacturers and suppliers is included on pg. 8). However, some of this sampling equipment has drawbacks or has been specifically rejected for low-flow sampling. The peristaltic pump can only be used for shallow applications and it can cause degassing of groundwater. Degassing results in the alteration of pH and alkalinity values as well as some loss of volatiles. Also, USEPA guidance asserts that inertial lift foot-valve type samplers and bailers cause too much groundwater disturbance and may invite unacceptable operator variability. Therefore, these sampling devices should be avoided for low-flow sampling activities.

When determining pump intake placement in the well, refer to the attached flowchart (Low Flow Monitoring Well Sampling – Determination of Pump/Tubing Intake). If the screen length allows, the pump intake should be at least two feet from the bottom of the screen. Placing the pump intake near the top of the water column can cause stagnant water from the casing to be purged, but placing the pump intake near to the bottom of the well can cause mobilization and entrainment of settled solids from the bottom of the well.

F. Tubing should be connected from the pump to a flow-through cell. Then, calculate the volume of water to fill the flow-through cell and tubing. According to American Society for Testing and Materials (ASTM) Standard D 6771 (2002), the frequency of measurements should be equal to the time required to completely evacuate one volume of the cell. This ensures that independent measurements are made.

G. The pump should be started at a low flow rate, approximately 100 mL/min or the lowest flow rate possible.

H. Water level measurements should continue every two minutes until the measurements indicate that significant drawdown is not occurring. According to ASTM standards

(2002), allowable drawdown should never exceed the distance between the top of the well screen and the pump intake. Including a safety factor, also provided by ASTM, drawdown should actually not exceed 25% of this distance. This ensures that water stored in the casing is not purged or sampled. For example, for a 4-foot screen, the pump should be placed at the midpoint of the screen (two feet from the top of the screen to the pump intake). With a safety factor of 25%, this would require drawdown not to exceed six inches. However, based on historical procedure at the Hartford Working Group Plume Site, a more conservative rule that drawdown should not exceed 0.3 feet may also be used. When using the Troll 9500® or similar monitoring equipment to calculate purge volume, a stabilized drawdown value should be used rather than the initial drawdown value.

Once it has been established that significant drawdown is not occurring, the flow rate may be increased to </= 1 L/m (ASTM, 2002) or, if the flow rate remains the same, water level measurements need only to be taken periodically. However, when the flow rate is increased, water level measurements must continue every two minutes.

If drawdown surpasses 0.3 feet while pumping is occurring at the lowest flow rate possible, then the well will be purged dry. The well should be sampled no sooner than twenty-four hours after being purged dry, and only after a sufficient volume (commonly 90%) has recovered, or the water level has recovered sufficiently to collect the anticipated samples (ideally the intake should not be moved during this recovery period). Samples may then be collected even though the indicator field parameters have not stabilized.

I. Parameters should be documented on the groundwater sampling form and in the logbook. The time between parameter measurements is calculated as follows:

$$T = \frac{V}{Q}$$, where

T = time between measurements (minutes)

V = volume of the flow-through cell + volume of the tubing (liters)

Q = purge flow rate (liters per minute)

Sampling should proceed as stated in the FSP or work plan. However, in most cases, purging will continue until specific parameters have stabilized over three consecutive readings, recorded at interval T as calculated in the equation above. **Table 1** provides

guidelines that may be used for parameter stabilization as specified by USEPA, ASTM, and in the Nielsen and Nielsen Technical Guidance on Low-Flow Purging and Sampling and Minimum-Purge Sampling (Nielsen and Nielsen, 2002). These guidelines are to be used in combination with professional judgment.

Table 1. Stabilization Guidelines for Low-Flow Sampling

Parameter	Stabilization Guidelines			
	EPA	ASTM	Nielsen & Nielsen	Site Specific Criteria Used by Hartford Working Group
DO	+/- 10%	+/- 10% or +/-0.2 mg/L, whichever is greatest	+/- 10% or +/-0.2 mg/L, whichever is greatest	+/- 0.3 mg/L
ORP	+/- 10 mV	+/- 20 mV	+/- 20 mV	+/- 10 mV
PH	+/- 0.1 units	+/- 0.2 units	+/- 0.2 units	+/- 0.1 units
Conductivity	+/- 3%	+/- 3%	+/- 3%	+/- 3%
Temperature	Not Specified	Not Specified	+/- 0.2 °C	+/- 3%
Turbidity	+/- 10%	Not Specified	Not Specified	+/- 10 %

J. After the relevant parameters have stabilized, the flow-through cell should be disconnected or bypassed for sampling. If, after a considerable number of readings have been taken, parameters have not stabilized, samplers should refer to the work plan or possibly use alternative sampling methods.

K. The flow rate should be adjusted to less than 0.5 L/min for sampling to minimize aeration during the sampling of volatiles.

L. A new pair of disposable latex or nitrile gloves should be put on immediately before sampling.

M. The constituents should be sampled for in the order given below:

- VOCs – Vials should be filled completely so that the water forms a convex meniscus then capped so that no air space exists in the vial. Turn the vial over and tap it to check for bubbles. If air bubbles are observed in the sample vial, remove the lid and

attempt to fill the vial two more times, (being careful not to dump out any groundwater currently in the vial). If air bubbles are present twice more, discard the sample vial and repeat the procedure with a new vial. If, after three attempts, air bubbles are still in the vial, make a note of this and place the vial in the cooler.

- Gas sensitive parameters (e.g., ferrous iron, methane, alkalinity)
- Semivolatile organic compounds, pesticides, polychlorinated biphenyls, and herbicides
- Petroleum hydrocarbons
- Metals (unfiltered)
- Explosives
- Any filtered analytes (use in-line filters if possible)

O. Place all samples on ice inside a cooler immediately.

P. Each sample should be identified with the Sample ID, location, analysis number, preservatives, date and time of sampling event, and sampler.

Q. The sample time and constituents to be analyzed for should be recorded in the logbook and on the groundwater sampling form.

R. Chain-of-custody procedures should be started.

S. Sample equipment should be decontaminated.

T. The well sampling order should be dependent on expected levels of contamination in each well, if known, and should be determined prior to sampling. Sampling should progress from the least contaminated to the most contaminated well. Quality assurance/quality control (QA/QC) samples should be collected during groundwater sampling as required in the work plan and/or QAPP.

4. *List Of Potential Suppliers Who Provide Pumps Suitable for Low-Flow Sampling:*

Field Environmental. 1-800-3930-4009. www.fieldenvironmental.com. Pumps: peristaltic, QED bladder pumps, Fultz rotor pump, control boxes, compressors, etc.

QED. 1-800-624-2026. www.micropurge.com. Pumps: bladder pumps, flow cell, compressors, etc.

Fultz Pumps. 1-717-248-2300. www.fultzpumps.com.

5. References

ASTM 2002, Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations, ASTM D6771-02, American Society for Testing and Materials. West Conshohocken, PA.

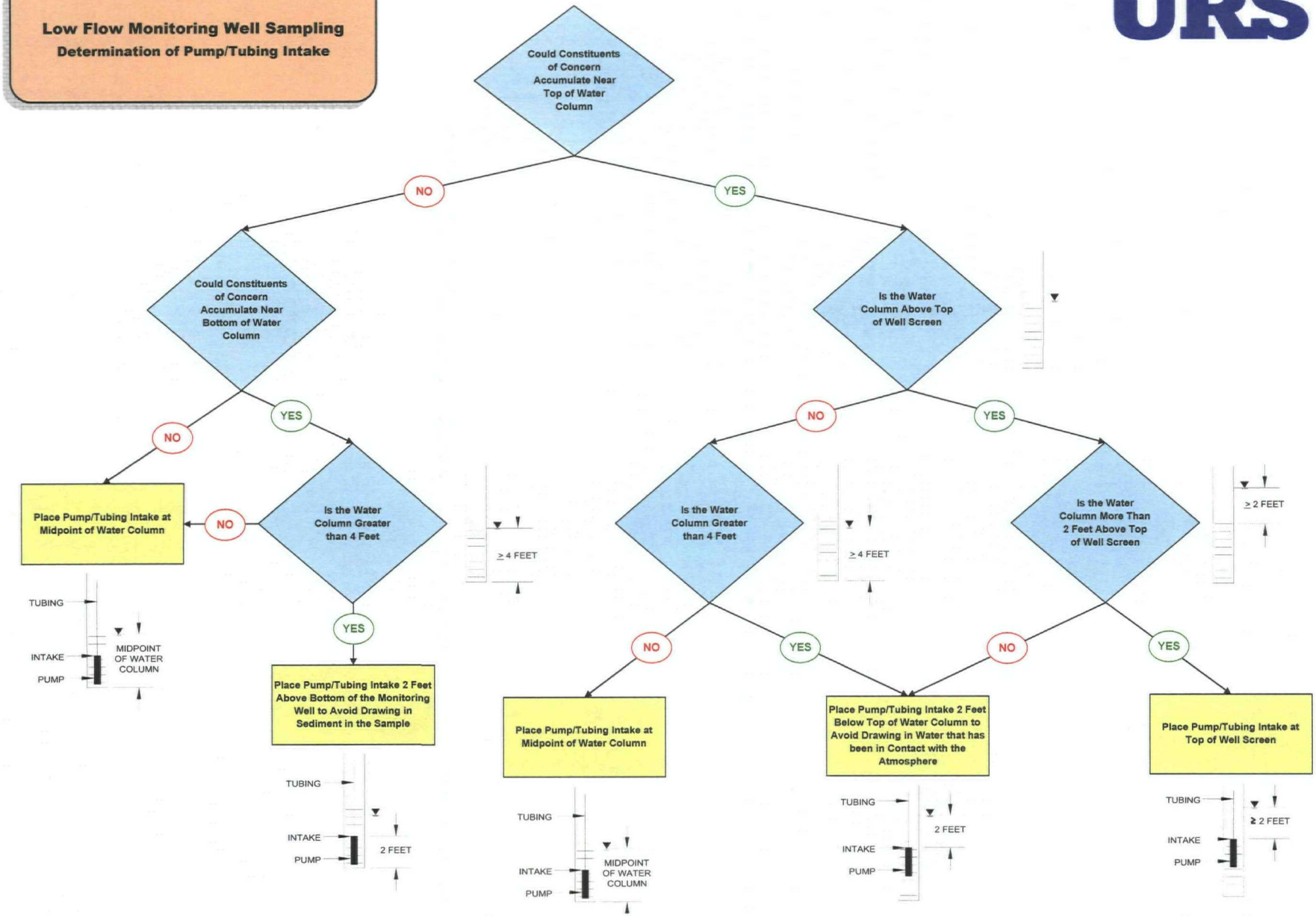
Nielsen, David and Nielsen, Gillian. Technical Guidance on Low-Flow Purging and Sampling and Minimum-Purge Sampling. Second Edition. NEFS-TG001-02. April 2002.

USEPA. 1996. Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures. EPA/540/S-95/504. OSWER, April 1996.

FLOWCHART

Low Flow Monitoring Well Sampling
Determination of Pump/Tubing Intake

URS



Note: If water column is <2 feet, DO NOT Use Low Flow Sampling SOP

APPENDIX D Summary of Indicator Parameter Measurements – July 2007

URS

In-Situ Inc.

Troll 9000 07/13/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	B_HIGGINS
Company Name	URS
Project Name	HARTFORD QUARTERLY GW SAMPLING-21561445 00106
Site Name	HARTFORD WORKING GROUP

Pump Information:

Pump Model/Type	QED SAMPLE SAMPLE PRO
Tubing Type	POLYETHYLENE
Tubing Diameter	0.07 [cm]
Tubing Length	127.95 [m]
Pump placement from TOC	86.94 [m]

Well Information:

Well Id	HMW-25
Well diameter	0.79 [cm]
Well total depth	115.29 [m]
Depth to top of screen	77.66 [m]
Screen length	69.45 [cm]
Depth to Water	86.02 [m]

Pumping information:

Final pumping rate	360 [mL/min]
Flowcell volume	725.07 [mL]
Calculated Sample Rate	121 [sec]
Sample rate	121 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	11:15:57	18.91	6.59	8329137.00	2283.74	0.02	-352.23
	11:17:58	18.70	6.59	8481747.00	2283.75	0.02	-363.18
	11:20:00	18.68	6.59	8599969.00	2283.75	0.02	-369.90
	11:22:02	18.74	6.58	8708878.00	2283.76	0.01	-376.11
	11:24:04	18.81	6.57	8759659.00	2283.76	0.02	-378.68
Variance in last 3 readings	11:20:00	-0.02	-0.01	118222.00	0.01	0.00	-6.72
	11:22:02	0.06	0.00	108909.00	0.01	0.00	-6.20
	11:24:04	0.07	-0.01	50781.00	0.01	0.01	-2.57

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-25-7-13-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder

Operator Name:	B HIGGINS
Company Name:	URS
Project Name:	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name:	HARTFORD WORKING GROUP
Well ID:	HMW-25

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED SAMPLE SAMPLE PRO
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.07 [cm]
Tubing Length:	127.95 [m]
Well Depth:	115.29 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.45 [cm]
Screen Depth:	77.66 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	86.02 [m]
Pump Level (TOC):	86.94 [m]

Final Pumping Rate:	360 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (174.1 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	725.07 [mL]
Actual Total Volume:	725.07 [mL]
Calculated Measurement Interval:	121 [sec]
Actual Measurement Interval:	121 [sec]

Start date/time:	7/13/2007	11:04:26
End date/time:	7/13/2007	11:24:50
Total Time:	0:20:24	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.59	0	-352.23	-16.47	0.02	-0.02	8329137	243283	2283.74	0.01	18.91	-0.06	11:15:57
3	6.59	0	-363.18	-10.95	0.02	0	8481747	152610	2283.75	0.01	18.7	-0.22	11:17:58
2	6.59	-0.01	-369.9	-6.72	0.02	0	8599969	118222	2283.75	0.01	18.68	-0.02	11:20:00
1	6.58	0	-376.11	-6.2	0.01	0	8708878	108909	2283.76	0.01	18.74	0.06	11:22:02
0	6.57	-0.01	-378.68	-2.57	0.02	0.01	8759659	50781	2283.76	0.01	18.81	0.07	11:24:04

pH Min:	6.57
pH Max:	6.59
ORP Min:	-378.68
ORP Max:	-352.23
RDO Min:	0.01
RDO Max:	0.02
Cond Min:	8329137
Cond Max:	8759659
Turb Min:	2283.74
Turb Max:	2283.76
Temp Min:	18.68
Temp Max:	18.91
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:22:37
Report from file:	...\HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-25-7-13-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45289	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/13/2007	11:04:26
Test started on:	7/13/2007	11:04:26
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		10
TOTAL DATA SAMPLES	10	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/13/2007	11:04:26	0	80.74	30.08	1171.8	6.639	-139	6.54	1097	-999999.9	-999999.9
7/13/2007	11:07:49	203	72.57	30.08	2283.7	6.639	-203	6.56	609	-999999.9	-999999.9
7/13/2007	11:09:51	325	68.22	30.08	2049	6.639	-266	6.59	207	-999999.9	-999999.9
7/13/2007	11:11:53	447	66.62	30.08	2283.7	6.639	-309	6.6	82	-999999.9	-999999.9
7/13/2007	11:13:55	569	66.15	30.08	2283.7	6.639	-336	6.6	40	-999999.9	-999999.9
7/13/2007	11:15:57	691	66.05	30.08	2283.7	6.639	-352	6.59	23	-999999.9	-999999.9
7/13/2007	11:17:58	812	65.66	30.08	2283.7	6.639	-363	6.59	19	-999999.9	-999999.9
7/13/2007	11:20:00	934	65.62	30.08	2283.8	6.639	-370	6.59	15	-999999.9	-999999.9
7/13/2007	11:22:02	1056	65.73	30.08	2283.8	6.639	-376	6.58	12	-999999.9	-999999.9
7/13/2007	11:24:04	1178	65.86	30.08	2283.8	6.639	-379	6.57	18	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/13/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	B_HIGGINS
Company Name	URS
Project Name	HARTFORD QUARTERLY GW SAMPLING-21581445.00106
Site Name	HARTFORD WORKING GROUP

Pump Information:

Pump Model/Type	QED SAMPLE SAMPLE PRO
Tubing Type	POLYETHYLENE
Tubing Diameter	0.07 [cm]
Tubing Length	127.95 [m]
Pump placement from TOC	101.9 [m]

Well Information:

Well Id	HMW-27
Well diameter	0.79 [cm]
Well total depth	114.93 [m]
Depth to top of screen	78.74 [m]
Screen length	69.45 [cm]
Depth to Water	95.34 [m]

Pumping information:

Final pumping rate	380 [mL/min]
Flowcell volume	725.07 [mL]
Calculated Sample Rate	115 [sec]
Sample rate	115 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	13:43:00	19.20	6.52	5659245.00	17.21	0.02	-339.95
	13:44:56	19.18	6.52	5668585.00	17.40	0.02	-337.56
	13:46:51	19.31	6.52	5679292.00	13.32	0.02	-336.62
	13:48:48	19.25	6.51	5672619.00	6.55	0.02	-333.37
	13:50:43	19.27	6.51	5690047.00	7.11	0.02	-331.66
Variance in last 3 readings	13:46:51	0.14	0.00	10707.00	-4.08	0.00	0.94
	13:48:48	-0.07	0.00	-6673.00	-6.77	0.00	3.25
	13:50:43	0.03	0.00	17428.00	0.56	0.01	1.71

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-27-7-13-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder

Operator Name:	B HIGGINS
Company Name:	URS
Project Name:	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name:	HARTFORD WORKING GROUP
Well ID:	HMW-27

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED SAMPLE SAMPLE PRO
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.07 [cm]
Tubing Length:	127.95 [m]
Well Depth:	114.93 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.45 [cm]
Screen Depth:	78.74 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	95.34 [m]
Pump Level (TOC):	101.9 [m]

Final Pumping Rate:	380 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (174.1 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	725.07 [mL]
Actual Total Volume:	725.07 [mL]
Calculated Measurement Interval:	115 [sec]
Actual Measurement Interval:	115 [sec]

Start date/time:	7/13/2007	13:17:54
End date/time:	7/13/2007	13:51:18
Total Time:	0:33:24	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.52	0	-339.95	2.95	0.02	0	5659245	-5298	17.21	7.17	19.2	0.01	13:43:00
3	6.52	0	-337.56	2.39	0.02	0	5668585	9340	17.4	0.19	19.18	-0.02	13:44:56
2	6.52	0	-336.62	0.94	0.02	0	5679292	10707	13.32	-4.08	19.31	0.14	13:46:51
1	6.51	0	-333.37	3.25	0.02	0	5672619	-6673	6.55	-6.77	19.25	-0.07	13:48:48
0	6.51	0	-331.66	1.71	0.02	0.01	5690047	17428	7.11	0.56	19.27	0.03	13:50:43

pH Min:	6.51
pH Max:	6.52
ORP Min:	-339.95
ORP Max:	-331.66
RDO Min:	0.02
RDO Max:	0.02
Cond Min:	5659245
Cond Max:	5690047
Turb Min:	6.55
Turb Max:	17.4
Temp Min:	19.18
Temp Max:	19.31

Notes:

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:23:14
Report from file:	...\HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-27-7-13-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45289	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/13/2007	13:17:54
Test started on:	7/13/2007	13:17:54
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		18
TOTAL DATA SAMPLES	18	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]

Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/13/2007	13:17:54	0	70.49	30.08	15.5	6.639	-243	6.53	671	-999999.9	-999999.9
7/13/2007	13:19:50	116	68.34	30.08	16.4	6.639	-283	6.54	250	-999999.9	-999999.9
7/13/2007	13:21:44	230	67.45	30.08	13.9	6.639	-309	6.54	113	-999999.9	-999999.9
7/13/2007	13:23:41	347	66.94	30.08	11.2	6.639	-327	6.53	66	-999999.9	-999999.9
7/13/2007	13:25:37	463	66.61	30.08	14	6.639	-336	6.53	49	-999999.9	-999999.9
7/13/2007	13:27:32	578	66.69	30.08	13	6.639	-342	6.53	46	-999999.9	-999999.9
7/13/2007	13:29:28	694	66.65	30.08	10.5	6.639	-346	6.52	32	-999999.9	-999999.9
7/13/2007	13:31:23	809	66.7	30.08	13.2	6.639	-346	6.52	31	-999999.9	-999999.9
7/13/2007	13:33:21	927	66.72	30.08	13.7	6.639	-346	6.52	28	-999999.9	-999999.9
7/13/2007	13:35:17	1043	66.68	30.08	8.2	6.639	-347	6.52	21	-999999.9	-999999.9
7/13/2007	13:37:12	1158	66.42	30.08	15.2	6.639	-346	6.52	18	-999999.9	-999999.9
7/13/2007	13:39:09	1275	66.64	30.08	15	6.639	-343	6.52	18	-999999.9	-999999.9
7/13/2007	13:41:05	1391	66.54	30.08	10	6.639	-343	6.52	15	-999999.9	-999999.9
7/13/2007	13:43:00	1506	66.55	30.08	17.2	6.639	-340	6.52	15	-999999.9	-999999.9
7/13/2007	13:44:56	1622	66.52	30.08	17.4	6.639	-338	6.52	18	-999999.9	-999999.9
7/13/2007	13:46:51	1737	66.77	30.08	13.3	6.639	-337	6.52	15	-999999.9	-999999.9
7/13/2007	13:48:48	1854	66.65	30.08	6.5	6.639	-333	6.51	16	-999999.9	-999999.9
7/13/2007	13:50:43	1969	66.69	30.08	7.1	6.639	-332	6.51	21	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000
07/16/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	B_HIGGINS
Company Name	URS
Project Name	HARTFORD QUARTERLY GW SAMPLING-21561445 00106
Site Name	HARTFORD WORKING GROUP

Pump Information:

Pump Model/Type	OED SAMPLE SAMPLE PRO
Tubing Type	POLYETHYLENE
Tubing Diameter	0.07 [cm]
Tubing Length	131.23 [m]
Pump placement from TOC	103.35 [m]

Well Information:

Well Id	HMW-28
Well diameter	0.79 [cm]
Well total depth	118.18 [m]
Depth to top of screen	80.94 [m]
Screen length	69.45 [cm]
Depth to Water	96.65 [m]

Pumping information:

Final pumping rate	440 [mL/min]
Flowcell volume	729.54 [mL]
Calculated Sample Rate	100 [sec]
Sample rate	100 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	9:01:45	17.07	6.51	5062707.50	19.14	0.31	-257.13
	9:03:27	17.07	6.51	5072298.50	17.66	0.26	-261.88
	9:05:06	16.99	6.51	5061696.00	14.99	0.22	-266.72
	9:06:47	16.98	6.52	5068097.00	15.64	0.20	-268.82
	9:08:29	17.02	6.51	5076647.50	15.62	0.18	-270.23
Variance in last 3 readings	9:05:06	-0.08	0.00	-10602.50	-2.68	-0.04	-4.84
	9:06:47	-0.01	0.00	6401.00	0.65	-0.03	-2.10
	9:08:29	0.04	0.00	8550.50	-0.01	-0.01	-1.42

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-28-7-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder

Operator Name:	B. HIGGINS
Company Name:	URS
Project Name:	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name:	HARTFORD WORKING GROUP
Well ID:	HMW-28

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED SAMPLE SAMPLE PRO
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.07 [cm]
Tubing Length:	131.23 [m]
Well Depth:	118.18 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.45 [cm]
Screen Depth:	80.94 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	96.65 [m]
Pump Level (TOC):	103.35 [m]

Final Pumping Rate:	440 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (178.5 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	729.54 [mL]
Actual Total Volume:	729.54 [mL]
Calculated Measurement Interval:	100 [sec]
Actual Measurement Interval:	100 [sec]

Start date/time:	7/16/2007	8:55:03
End date/time:	7/16/2007	9:09:15
Total Time:	0:14:12	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.51	0	-257.13	-5.82	0.31	-0.08	5062707.5	-5297	19.14	1.45	17.07	-0.1	9:01:45
3	6.51	0	-261.88	-4.75	0.26	-0.05	5072298.5	9591	17.66	-1.48	17.07	0	9:03:27
2	6.51	0	-266.72	-4.84	0.22	-0.04	5061696	-10602.5	14.99	-2.68	16.99	-0.08	9:05:06
1	6.52	0	-268.82	-2.1	0.2	-0.03	5068097	6401	15.64	0.65	16.98	-0.01	9:06:47
0	6.51	0	-270.23	-1.42	0.18	-0.01	5076647.5	8550.5	15.62	-0.01	17.02	0.04	9:08:29

pH Min:	6.51
pH Max:	6.52
ORP Min:	-270.23
ORP Max:	-257.13
RDO Min:	0.18
RDO Max:	0.31
Cond Min:	5061696
Cond Max:	5076647.5
Turb Min:	14.99
Turb Max:	19.14
Temp Min:	16.98
Temp Max:	17.07
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:23:44
Report from file:	...\HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-28-7-16-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45289	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/16/2007	8:55:03
Test started on:	7/16/2007	8:55:03
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		9
TOTAL DATA SAMPLES	9	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/16/2007	8:55:03	0	64.61	30.08	21	6.639	-198	6.49	1886	-999999.9	-999999.9
7/16/2007	8:56:44	101	63.89	30.08	23.2	6.639	-226	6.5	964	-999999.9	-999999.9
7/16/2007	8:58:24	201	63.3	30.08	23.8	6.639	-242	6.51	586	-999999.9	-999999.9
7/16/2007	9:00:05	302	62.9	30.08	17.7	6.639	-251	6.51	391	-999999.9	-999999.9
7/16/2007	9:01:45	402	62.72	30.08	19.1	6.639	-257	6.51	310	-999999.9	-999999.9
7/16/2007	9:03:27	504	62.72	30.08	17.7	6.639	-262	6.51	259	-999999.9	-999999.9
7/16/2007	9:05:06	603	62.58	30.08	15	6.639	-267	6.51	224	-999999.9	-999999.9
7/16/2007	9:06:47	704	62.56	30.08	15.6	6.639	-269	6.52	196	-999999.9	-999999.9
7/16/2007	9:08:29	806	62.64	30.08	15.6	6.639	-270	6.51	184	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/16/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	B_HIGGINS
Company Name	URS
Project Name	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name	HARTFORD WORKING GROUP

Pump Information:

Pump Model/Type	QED SAMPLE SAMPLE PRO
Tubing Type	POLYETHYLENE
Tubing Diameter	0.07 [cm]
Tubing Length	114.83 [m]
Pump placement from TOC	96.78 [m]

Well Information:

Well Id	HMW-29
Well diameter	0.79 [cm]
Well total depth	113.35 [m]
Depth to top of screen	81.56 [m]
Screen length	69.45 [cm]
Depth to Water	90.06 [m]

Pumping information:

Final pumping rate	440 [mL/min]
Flowcell volume	707.22 [mL]
Calculated Sample Rate	97 [sec]
Sample rate	97 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	10:05:31	16.91	6.63	4990535.50	8.28	0.12	-318.50
	10:07:08	16.86	6.63	4987476.00	8.34	0.09	-329.83
	10:08:45	16.86	6.63	4987503.00	7.06	0.08	-337.02
	10:10:23	16.89	6.63	4987529.50	6.25	0.07	-342.50
	10:12:02	16.86	6.63	4974200.00	6.86	0.07	-343.96
Variance in last 3 readings	10:08:45	0.01	0.00	27.00	-1.28	-0.01	-7.19
	10:10:23	0.03	0.00	26.50	-0.81	-0.01	-5.48
	10:12:02	-0.03	0.00	-13329.50	0.61	-0.01	-1.46

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-29-7-18-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in the folder

Operator Name:	B HIGGINS
Company Name:	URS
Project Name:	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name:	HARTFORD WORKING GROUP
Well ID:	HMW-29

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED SAMPLE SAMPLE PRO
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.07 [cm]
Tubing Length:	114.83 [m]
Well Depth:	113.35 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.45 [cm]
Screen Depth:	81.56 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	90.06 [m]
Pump Level (TOC):	96.78 [m]

Final Pumping Rate:	440 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (156.2 mL) - pH, ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	707.22 [mL]
Actual Total Volume:	707.22 [mL]
Calculated Measurement Interval:	97 [sec]
Actual Measurement Interval:	97 [sec]

Start date/time:	7/16/2007	9:57:22
End date/time:	7/16/2007	10:12:37
Total Time:	0:15:15	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.63	0	-318.5	-17.07	0.12	-0.04	4990535.5	-13406.5	8.28	0.1	16.91	-0.08	10:05:31
3	6.63	0	-329.83	-11.34	0.09	-0.02	4987476	-3059.5	8.34	0.06	16.86	-0.06	10:07:08
2	6.63	0	-337.02	-7.19	0.08	-0.01	4987503	27	7.06	-1.28	16.86	0.01	10:08:45
1	6.63	0	-342.5	-5.48	0.07	-0.01	4987529.5	26.5	6.25	-0.81	16.89	0.03	10:10:23
0	6.63	0	-343.96	-1.46	0.07	-0.01	4974200	-13329.5	6.86	0.61	16.86	-0.03	10:12:02

pH Min:	6.63
pH Max:	6.63
ORP Min:	-343.96
ORP Max:	-318.5
RDO Min:	0.07
RDO Max:	0.12
Cond Min:	4974200
Cond Max:	4990535.5
Turb Min:	6.25
Turb Max:	8.34
Temp Min:	16.86
Temp Max:	16.91
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:24:15
Report from file:	...\HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-HMW-29-7-18-2007.flo.bln	
Win-Situ® Version	4.57.0.0	
Serial number:	45289	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/16/2007	9:57:22
Test started on:	7/16/2007	9:57:22
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		10
TOTAL DATA SAMPLES	10	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/16/2007	9:57:22	0	65.31	30.08	11.7	6.639	-185	6.62	2818	-999999.9	-999999.9
7/16/2007	9:58:59	97	63.78	30.08	9.8	6.639	-233	6.63	1279	-999999.9	-999999.9
7/16/2007	10:00:37	195	63.13	30.08	9.3	6.639	-265	6.64	567	-999999.9	-999999.9
7/16/2007	10:02:15	293	62.73	30.08	9	6.639	-287	6.63	277	-999999.9	-999999.9
7/16/2007	10:03:53	391	62.58	30.08	8.2	6.639	-301	6.63	159	-999999.9	-999999.9
7/16/2007	10:05:31	489	62.44	30.08	8.3	6.639	-318	6.63	115	-999999.9	-999999.9
7/16/2007	10:07:08	586	62.34	30.08	8.3	6.639	-330	6.63	92	-999999.9	-999999.9
7/16/2007	10:08:45	683	62.35	30.08	7.1	6.639	-337	6.63	83	-999999.9	-999999.9
7/16/2007	10:10:23	781	62.41	30.08	6.2	6.639	-343	6.63	73	-999999.9	-999999.9
7/16/2007	10:12:02	880	62.35	30.08	6.9	6.639	-344	6.63	67	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000
07/20/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	BHIGGINS
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445 00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	DEDICATED
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	131.23 [m]
Pump placement from TOC	104.1 [m]

Well Information:

Well Id	HMW-39C
Well diameter	0.79 [cm]
Well total depth	137.8 [m]
Depth to top of screen	104.1 [m]
Screen length	45.83 [cm]
Depth to Water	90.35 [m]

Pumping information:

Final pumping rate	350 [mL/min]
Flowcell volume	729.54 [mL]
Calculated Sample Rate	126 [sec]
Sample rate	126 [sec]
Stabilized drawdown	0.48 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	8:24:28	15.47	7.11	888.11	19.19	0.04	-219.91
	8:26:38	15.43	7.11	888.32	14.80	0.04	-222.35
	8:28:49	15.40	7.11	887.15	19.64	0.03	-225.36
	8:30:58	15.40	7.11	884.95	18.30	0.03	-226.91
	8:33:09	15.39	7.11	884.31	17.94	0.03	-228.76
Variance in last 3 readings	8:28:49	-0.03	0.00	-1.17	4.84	0.00	-3.00
	8:30:58	0.00	0.00	-2.20	-1.34	0.00	-1.55
	8:33:09	-0.01	0.00	-0.64	-0.36	0.00	-1.85

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-39C-7-20-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	BHIGGINS
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-39C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [uS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	DEDICATED
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	131.23 [m]
Well Depth:	137.8 [m]
Well Diam:	0.79 [cm]
Screen Len:	45.83 [cm]
Screen Depth:	104.1 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	90.35 [m]
Pump Level (TOC):	104.1 [m]

Final Pumping Rate:	350 [mL/min]
Stable Draw Down:	0.48 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (178.5 mL) - pH_ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	729.54 [mL]
Actual Total Volume:	729.54 [mL]
Calculated Measurement Interval:	126 [sec]
Actual Measurement Interval:	126 [sec]

Start date/time:	7/20/2007	7:51:52
End date/time:	7/20/2007	8:34:11
Total Time:	0:42:19	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [uS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	7.11	0	-219.91	-2.92	0.04	0	888.11	-2.41	19.19	-0.71	15.47	-0.07	8:24:28
3	7.11	0	-222.35	-2.45	0.04	0	888.32	0.21	14.8	-4.39	15.43	-0.04	8:26:38
2	7.11	0	-225.36	-3	0.03	0	887.15	-1.17	19.64	4.84	15.4	-0.03	8:28:49
1	7.11	0	-226.91	-1.55	0.03	0	884.95	-2.2	18.3	-1.34	15.4	0	8:30:58
0	7.11	0	-228.76	-1.85	0.03	0	884.31	-0.64	17.94	-0.36	15.39	-0.01	8:33:09

pH Min:	7.11
pH Max:	7.11
ORP Min:	-228.76
ORP Max:	-219.91
RDO Min:	0.03
RDO Max:	0.04
Cond Min:	884.31
Cond Max:	888.32
Turb Min:	14.8
Turb Max:	19.64
Temp Min:	15.39
Temp Max:	15.47

Notes:

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:13:31
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-39C-7-20-2007.flo.bin	
WIn-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/20/2007	7:51:52
Test started on:	7/20/2007	7:51:52
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		20
TOTAL DATA SAMPLES	20	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/20/2007	7:51:52	0	60.9	30.08	63.9	6.639	-67	7.05	2153	21.7728	691.13
7/20/2007	7:54:01	129	60.14	30.08	63.7	6.639	-106	7.06	754	7.5592	836.12
7/20/2007	7:56:12	260	59.98	30.08	57.5	6.639	-138	7.08	301	3.0175	864.95
7/20/2007	7:58:23	391	60.3	30.08	47.5	6.639	-159	7.1	156	1.57	882.25
7/20/2007	8:00:33	521	60.54	30.08	40.8	6.639	-171	7.1	108	1.0923	890.65
7/20/2007	8:02:44	652	60.67	30.08	26.7	6.639	-179	7.11	91	0.9161	898.46
7/20/2007	8:04:53	781	60.68	30.08	32.6	6.639	-186	7.11	76	0.7722	903.86
7/20/2007	8:07:04	912	60.65	30.08	29.6	6.639	-191	7.11	71	0.7126	905.67
7/20/2007	8:09:14	1042	60.42	30.08	26.6	6.639	-196	7.11	64	0.6431	900.26
7/20/2007	8:11:25	1173	60.19	30.08	23.6	6.639	-200	7.12	53	0.5318	896.87
7/20/2007	8:13:36	1304	60.03	30.08	20.3	6.639	-204	7.12	51	0.514	894.24
7/20/2007	8:15:46	1434	60.01	30.08	24	6.639	-208	7.12	45	0.4551	892.87
7/20/2007	8:17:57	1565	60.11	30.08	21.5	6.639	-211	7.12	44	0.4388	892.56
7/20/2007	8:20:06	1694	60.07	30.08	16	6.639	-214	7.11	44	0.4386	891.54
7/20/2007	8:22:17	1825	59.98	30.08	19.9	6.639	-217	7.11	40	0.3961	890.52
7/20/2007	8:24:28	1956	59.84	30.08	19.2	6.639	-220	7.11	38	0.3787	888.11
7/20/2007	8:26:38	2086	59.77	30.08	14.8	6.639	-222	7.11	38	0.3783	888.32
7/20/2007	8:28:49	2217	59.71	30.08	19.6	6.639	-225	7.11	35	0.3446	887.15
7/20/2007	8:30:58	2346	59.72	30.08	18.3	6.639	-227	7.11	34	0.3362	884.95
7/20/2007	8:33:09	2477	59.71	30.08	17.9	6.639	-229	7.11	30	0.3027	884.31

URS

In-Situ Inc.

Troll 9000
07/12/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445 00108
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	127.95 [m]
Pump placement from TOC	104.99 [m]

Well Information:

Well Id	HMW-40C
Well diameter	0.79 [cm]
Well total depth	127.95 [m]
Depth to top of screen	77.07 [m]
Screen length	69.45 [cm]
Depth to Water	82.94 [m]

Pumping information:

Final pumping rate	500 [mL/min]
Flowcell volume	725.07 [mL]
Calculated Sample Rate	88 [sec]
Sample rate	88 [sec]
Stabilized drawdown	0.03 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	14:30:17	17.72	6.88	3252740.50	136.23	0.11	-148.50
	14:31:48	17.58	6.89	3255009.25	138.82	0.09	-157.63
	14:33:19	17.52	6.92	3251310.50	145.71	0.08	-163.25
	14:34:51	17.48	6.95	3254439.75	140.87	0.08	-168.43
	14:36:20	17.44	6.99	3255015.25	150.28	0.07	-172.34
Variance in last 3 readings	14:33:19	-0.06	0.03	-3698.75	6.89	-0.02	-5.62
	14:34:51	-0.04	0.03	3129.25	-4.84	0.00	-5.19
	14:36:20	-0.04	0.04	575.50	9.40	-0.01	-3.91

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-40C-7-12-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-40C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	127.95 [m]
Well Depth:	127.95 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.45 [cm]
Screen Depth:	77.07 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	82.94 [m]
Pump Level (TOC):	104.99 [m]

Final Pumping Rate:	500 [mL/min]
Stable Draw Down:	0.03 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (174.1 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	725.07 [mL]
Actual Total Volume:	725.07 [mL]
Calculated Measurement Interval:	88 [sec]
Actual Measurement Interval:	88 [sec]

Start date/time:	7/12/2007	14:24:14
End date/time:	7/12/2007	14:37:47
Total Time:	0:13:33	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.88	-0.01	-148.5	-8.27	0.11	-0.05	3252740.5	-23075.5	136.23	10.8	17.72	-0.21	14:30:17
3	6.89	0.01	-157.63	-9.12	0.09	-0.02	3255009.25	2268.75	138.82	2.59	17.58	-0.14	14:31:48
2	6.92	0.03	-163.25	-5.62	0.08	-0.02	3251310.5	-3698.75	145.71	6.89	17.52	-0.06	14:33:19
1	6.95	0.03	-168.43	-5.19	0.08	0	3254439.75	3129.25	140.87	-4.84	17.48	-0.04	14:34:51
0	6.99	0.04	-172.34	-3.91	0.07	-0.01	3255015.25	575.5	150.28	9.4	17.44	-0.04	14:36:20

pH Min:	6.88
pH Max:	6.99
ORP Min:	-172.34
ORP Max:	-148.5
RDO Min:	0.07
RDO Max:	0.11
Cond Min:	3251310.5
Cond Max:	3255015.25
Turb Min:	136.23
Turb Max:	150.28
Temp Min:	17.44
Temp Max:	17.72

Notes:

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:16:52
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-40C-7-12-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/12/2007	14:24:14
Test started on:	7/12/2007	14:24:14
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		9
TOTAL DATA SAMPLES	9	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/12/2007	14:24:14	0	67.24	30.08	131.4	6.639	-82	7.03	1142	-999999.9	-999999.9
7/12/2007	14:25:44	90	65.66	30.08	122	6.639	-109	6.96	521	-999999.9	-999999.9
7/12/2007	14:27:15	181	64.82	30.08	123.2	6.639	-127	6.92	259	-999999.9	-999999.9
7/12/2007	14:28:46	272	64.27	30.08	125.4	6.639	-140	6.89	165	-999999.9	-999999.9
7/12/2007	14:30:17	363	63.89	30.08	136.2	6.639	-149	6.88	113	-999999.9	-999999.9
7/12/2007	14:31:48	454	63.64	30.08	138.8	6.639	-158	6.89	92	-999999.9	-999999.9
7/12/2007	14:33:19	545	63.54	30.08	145.7	6.639	-163	6.92	77	-999999.9	-999999.9
7/12/2007	14:34:51	637	63.46	30.08	140.9	6.639	-168	6 95	80	-999999.9	-999999.9
7/12/2007	14:36:20	726	63.39	30.08	150.3	6.639	-172	6.99	75	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000
07/16/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445 00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	132.87 [m]
Pump placement from TOC	106.63 [m]

Well Information:

Well Id	HMW-49C
Well diameter	0.79 [cm]
Well total depth	129.59 [m]
Depth to top of screen	97.08 [m]
Screen length	43.94 [cm]
Depth to Water	100.13 [m]

Pumping information:

Final pumping rate	90 [mL/min]
Flowcell volume	731.77 [mL]
Calculated Sample Rate	488 [sec]
Sample rate	488 [sec]
Stabilized drawdown	0.32 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	10:23:34	22.18	6.39	4309473.50	34.16	0.07	-171.56
	10:28:38	22.50	6.41	4428154.00	39.36	0.05	-187.49
	10:32:35	23.08	6.42	4538612.50	40.16	0.05	-194.21
	10:41:01	23.74	6.44	4746912.00	54.23	0.03	-204.96
	10:44:05	27.30	7.14	7237.75	-0.69	7.55	-75.79
Variance in last 3 readings	10:32:35	0.58	0.01	110458.50	0.80	-0.01	-6.72
	10:41:01	0.66	0.02	208299.50	14.08	-0.02	-10.75
	10:44:05	3.56	0.70	-4739674.25	-54.92	7.53	129.17

Notes: could not keep drawdown <0.3 ft. purged well dry and will sample in 48 hrs

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-49C-7-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-49C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	132.87 [m]
Well Depth:	129.59 [m]
Well Diam:	0.79 [cm]
Screen Len:	43.94 [cm]
Screen Depth:	97.08 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	100.13 [m]
Pump Level (TOC):	106.63 [m]

Final Pumping Rate:	90 [mL/min]
Stable Draw Down:	0.32 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (180.8 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	731.77 [mL]
Actual Total Volume:	731.77 [mL]
Calculated Measurement Interval:	488 [sec]
Actual Measurement Interval:	488 [sec]

Start date/time:	7/16/2007	10:14:32
End date/time:	7/16/2007	10:44:08
Total Time:	0:29:36	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.39	0.01	-171.56	-12.25	0.07	-0.01	4309473.5	80049.5	34.16	0.09	22.18	0.25	10:23:34
3	6.41	0.02	-187.49	-15.93	0.05	-0.02	4428154	118680.5	39.36	5.2	22.5	0.32	10:28:38
2	6.42	0.01	-194.21	-6.72	0.05	-0.01	4538612.5	110458.5	40.16	0.8	23.08	0.58	10:32:35
1	6.44	0.02	-204.96	-10.75	0.03	-0.02	4746912	208299.5	54.23	14.08	23.74	0.66	10:41:01
0	7.14	0.7	-75.79	129.17	7.55	7.53	7237.75	-4739674.25	-0.69	-54.92	27.3	3.56	10:44:05

pH Min:	6.39
pH Max:	7.14
ORP Min:	-204.96
ORP Max:	-75.79
RDO Min:	0.03
RDO Max:	7.55
Cond Min:	7237.75
Cond Max:	4746912
Turb Min:	-0.69
Turb Max:	54.23
Temp Min:	22.18
Temp Max:	27.3
Notes:	could not keep drawdown <0.3 ft. purged well dry and will sample in 48 hrs

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:17:34
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-49C-7-16-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/16/2007	10:14:32
Test started on:	7/16/2007	10:14:32
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		8
TOTAL DATA SAMPLES	8	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP miltivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/16/2007	10:14:32	0	71.89	30.08	7.9	6.639	-126	6.37	136	-999999.9	-999999.9
7/16/2007	10:17:33	181	70.62	30.08	23.9	6.639	-145	6.38	86	-999999.9	-999999.9
7/16/2007	10:20:36	364	71.47	30.08	34.1	6.639	-159	6.38	83	-999999.9	-999999.9
7/16/2007	10:23:34	542	71.92	30.08	34.2	6.639	-172	6.39	71	-999999.9	-999999.9
7/16/2007	10:28:38	846	72.5	30.08	39.4	6.639	-187	6.41	53	-999999.9	-999999.9
7/16/2007	10:32:35	1083	73.54	30.08	40.2	6.639	-194	6.42	48	-999999.9	-999999.9
7/16/2007	10:41:01	1589	74.73	30.08	54.2	6.639	-205	6.44	29	-999999.9	-999999.9
7/16/2007	10:44:05	1773	81.13	30.08	-0.7	6.639	-76	7.14	7554	96.9115	7237.75

URS

In-Situ Inc.

Troll 9000
07/16/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	167.32 [m]
Pump placement from TOC	134.51 [m]

Well Information:

Well Id	HMW-49D
Well diameter	0.79 [cm]
Well total depth	167.32 [m]
Depth to top of screen	133.6 [m]
Screen length	45.35 [cm]
Depth to Water	105.15 [m]

Pumping information:

Final pumping rate	200 [mL/min]
Flowcell volume	778.64 [mL]
Calculated Sample Rate	234 [sec]
Sample rate	234 [sec]
Stabilized drawdown	0 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	8:43:01	20.79	6.60	5052921.50	17.56	0.04	-226.43
	8:47:03	20.63	6.60	5037083.00	13.48	0.04	-228.70
	8:51:07	20.37	6.60	4990242.50	12.60	0.04	-235.00
	8:55:09	20.29	6.60	4991323.00	13.84	0.03	-240.95
	8:59:12	20.15	6.60	4995391.00	11.31	0.03	-244.24
Variance in last 3 readings	8:51:07	-0.26	0.00	-46840.50	-0.88	0.00	-6.30
	8:55:09	-0.08	0.00	1080.50	1.23	-0.01	-5.95
	8:59:12	-0.14	0.00	4068.00	-2.53	0.00	-3.29

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-49D-7-16-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W. Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-49D

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	167.32 [m]
Well Depth:	167.32 [m]
Well Diam:	0.79 [cm]
Screen Len:	45.35 [cm]
Screen Depth:	133.6 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	105.15 [m]
Pump Level (TOC):	134.51 [m]

Final Pumping Rate:	200 [mL/min]
Stable Draw Down:	0 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (227.6 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	778.64 [mL]
Actual Total Volume:	778.64 [mL]
Calculated Measurement Interval:	234 [sec]
Actual Measurement Interval:	234 [sec]

Start date/time:	7/16/2007	8:06:38
End date/time:	7/16/2007	9:03:02
Total Time:	0:56:24	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.6	0	-226.43	-5.86	0.04	0	5052921.5	7532	17.56	4.1	20.79	0.12	8:43:01
3	6.6	0	-228.7	-2.27	0.04	0	5037083	-15838.5	13.48	-4.07	20.63	-0.16	8:47:03
2	6.6	0	-235	-6.3	0.04	0	4990242.5	-46840.5	12.6	-0.88	20.37	-0.26	8:51:07
1	6.6	0	-240.95	-5.95	0.03	-0.01	4991323	1080.5	13.84	1.23	20.29	-0.08	8:55:09
0	6.6	0	-244.24	-3.29	0.03	0	4995391	4068	11.31	-2.53	20.15	-0.14	8:59:12

pH Min:	6.6
pH Max:	6.6
ORP Min:	-244.24
ORP Max:	-226.43
RDO Min:	0.03
RDO Max:	0.04
Cond Min:	4990242.5
Cond Max:	5052921.5
Turb Min:	11.31
Turb Max:	17.56
Temp Min:	20.15
Temp Max:	20.79
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:18:31
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-49D-7-16-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/16/2007	8:06:38
Test started on:	7/16/2007	8:06:38
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		14
TOTAL DATA SAMPLES	14	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/16/2007	8:06:38	0	70.38	30.08	4.1	6.639	-149	6.64	500	-999999.9	-999999.9
7/16/2007	8:10:41	243	69.16	30.08	6.2	6.639	-163	6.62	317	-999999.9	-999999.9
7/16/2007	8:14:44	486	68.94	30.08	15.7	6.639	-175	6.61	199	-999999.9	-999999.9
7/16/2007	8:18:45	727	68.85	30.08	13.7	6.639	-184	6.6	156	-999999.9	-999999.9
7/16/2007	8:22:49	971	69.15	30.08	18	6.639	-192	6.6	111	-999999.9	-999999.9
7/16/2007	8:26:51	1213	69.63	30.08	32.9	6.639	-200	6.59	81	-999999.9	-999999.9
7/16/2007	8:30:54	1456	69.26	30.08	52.7	6.639	-206	6.6	60	-999999.9	-999999.9
7/16/2007	8:34:56	1698	69.34	30.08	35.1	6.639	-214	6.6	55	-999999.9	-999999.9
7/16/2007	8:38:59	1941	69.2	30.08	13.5	6.639	-221	6.6	43	-999999.9	-999999.9
7/16/2007	8:43:01	2183	69.42	30.08	17.6	6.639	-226	6.6	43	-999999.9	-999999.9
7/16/2007	8:47:03	2425	69.13	30.08	13.5	6.639	-229	6.6	41	-999999.9	-999999.9
7/16/2007	8:51:07	2669	68.67	30.08	12.6	6.639	-235	6.6	37	-999999.9	-999999.9
7/16/2007	8:55:09	2911	68.52	30.08	13.8	6.639	-241	6.6	30	-999999.9	-999999.9
7/16/2007	8:59:12	3154	68.28	30.08	11.3	6.639	-244	6.6	29	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/13/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21581445.00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	98.43 [m]
Pump placement from TOC	66.11 [m]

Well Information:

Well Id	HMW-50A
Well diameter	0.79 [cm]
Well total depth	98.03 [m]
Depth to top of screen	66.08 [m]
Screen length	43.94 [cm]
Depth to Water	59.55 [m]

Pumping information:

Final pumping rate	480 [mL/min]
Flowcell volume	684.9 [mL]
Calculated Sample Rate	86 [sec]
Sample rate	86 [sec]
Stabilized drawdown	0.07 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	12:19:49	16.53	6.74	6397768.50	30.06	0.08	-120.15
	12:21:18	16.48	6.74	6381782.50	31.98	0.08	-124.66
	12:22:47	16.49	6.74	6390564.00	30.07	0.08	-127.66
	12:24:16	16.22	6.74	6356478.00	29.29	0.06	-131.48
	12:25:45	16.19	6.74	6355274.00	27.76	0.06	-133.25
Variance in last 3 readings	12:22:47	0.01	0.00	8781.50	-1.91	0.00	-3.01
	12:24:16	-0.26	0.00	-34086.00	-0.78	-0.01	-3.82
	12:25:45	-0.03	0.00	-1204.00	-1.52	0.00	-1.76

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50A-7-13-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-50A

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	98.43 [m]
Well Depth:	98.03 [m]
Well Diam:	0.79 [cm]
Screen Len:	43.94 [cm]
Screen Depth:	66.08 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	59.55 [m]
Pump Level (TOC):	66.11 [m]

Final Pumping Rate:	480 [mL/min]
Stable Draw Down:	0.07 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (133.9 mL) - pH_ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	684.9 [mL]
Actual Total Volume:	684.9 [mL]
Calculated Measurement Interval:	86 [sec]
Actual Measurement Interval:	86 [sec]

Start date/time:	7/13/2007	12:07:58
End date/time:	7/13/2007	12:26:48
Total Time:	0:18:50	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.74	0	-120.15	-5.28	0.08	0.01	6397768.5	22041	30.06	-2.66	16.53	0.15	12:19:49
3	6.74	0	-124.66	-4.5	0.08	0	6381782.5	-15986	31.98	1.92	16.48	-0.05	12:21:18
2	6.74	0	-127.66	-3.01	0.08	0	6390564	8781.5	30.07	-1.91	16.49	0.01	12:22:47
1	6.74	0	-131.48	-3.82	0.06	-0.01	6356478	-34086	29.29	-0.78	16.22	-0.26	12:24:16
0	6.74	0	-133.25	-1.76	0.06	0	6355274	-1204	27.76	-1.52	16.19	-0.03	12:25:45

pH Min:	6.74
pH Max:	6.74
ORP Min:	-133.25
ORP Max:	-120.15
RDO Min:	0.06
RDO Max:	0.08
Cond Min:	6355274
Cond Max:	6397768.5
Turb Min:	27.76
Turb Max:	31.98
Temp Min:	16.19
Temp Max:	16.53
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:19:03
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50A-7-13-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/13/2007	12:07:58
Test started on:	7/13/2007	12:07:58
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		13
TOTAL DATA SAMPLES	13	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/13/2007	12:07:58	0	62.67	30.08	111.4	6.639	-65	6.72	433	-999999.9	-999999.9
7/13/2007	12:09:27	89	62.29	30.08	95.3	6.639	-75	6.72	260	-999999.9	-999999.9
7/13/2007	12:10:56	178	61.95	30.08	86.3	6.639	-81	6.72	184	-999999.9	-999999.9
7/13/2007	12:12:25	267	61.77	30.08	60.3	6.639	-87	6.72	141	-999999.9	-999999.9
7/13/2007	12:13:53	355	61.73	30.08	53.2	6.639	-93	6.72	114	-999999.9	-999999.9
7/13/2007	12:15:22	444	61.5	30.08	43	6.639	-101	6.73	95	-999999.9	-999999.9
7/13/2007	12:16:51	533	61.61	30.08	35.2	6.639	-108	6.73	91	-999999.9	-999999.9
7/13/2007	12:18:20	622	61.49	30.08	32.7	6.639	-115	6.73	76	-999999.9	-999999.9
7/13/2007	12:19:49	711	61.75	30.08	30.1	6.639	-120	6.74	82	-999999.9	-999999.9
7/13/2007	12:21:18	800	61.66	30.08	32	6.639	-125	6.74	80	-999999.9	-999999.9
7/13/2007	12:22:47	889	61.67	30.08	30.1	6.639	-128	6.74	76	-999999.9	-999999.9
7/13/2007	12:24:16	978	61.2	30.08	29.3	6.639	-131	6.74	64	-999999.9	-999999.9
7/13/2007	12:25:45	1067	61.15	30.08	27.8	6.639	-133	6.74	60	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/18/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21581445 00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	150.92 [m]
Pump placement from TOC	125.33 [m]

Well Information:

Well Id	HMW-50B
Well diameter	0.79 [cm]
Well total depth	140.49 [m]
Depth to top of screen	125.56 [m]
Screen length	21.73 [cm]
Depth to Water	106.86 [m]

Pumping information:

Final pumping rate	125 [mL/min]
Flowcell volume	756.32 [mL]
Calculated Sample Rate	364 [sec]
Sample rate	364 [sec]
Stabilized drawdown	0.48 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	*9:11:21*	*20.47*	*7.10*	*10644281.00*	*6.89*	*0.03*	*-254.68*
	9:17:38	20.59	7.09	10664499.00	7.40	0.02	-263.55
	9:23:56	20.41	7.09	10621585.00	7.46	0.02	-273.04
	9:30:12	20.52	7.09	10714469.00	8.23	0.01	-280.35
	9:36:30	20.74	7.08	10862321.00	8.86	0.01	-287.53
Variance in last 3 readings	9:23:56	-0.17	0.00	-42914.00	0.06	0.00	-9.49
	9:30:12	0.11	-0.01	92884.00	0.77	0.00	-7.31
	9:36:30	0.22	-0.01	147852.00	0.63	0.00	-7.18

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50B-7-18-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-50B

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	150.92 [m]
Well Depth:	140.49 [m]
Well Diam:	0.79 [cm]
Screen Len:	21.73 [cm]
Screen Depth:	125.56 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	106.86 [m]
Pump Level (TOC):	125.33 [m]

Final Pumping Rate:	125 [mL/min]
Stable Draw Down:	0.48 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (205.3 mL) - pH_ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	756.32 [mL]
Actual Total Volume:	756.32 [mL]
Calculated Measurement Interval:	364 [sec]
Actual Measurement Interval:	364 [sec]

Start date/time:	7/18/2007	8:46:10
End date/time:	7/18/2007	9:40:58
Total Time:	0:54:48	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	7.1	-0.01	-254.68	-8.36	0.03	-0.02	10644281	269794	6.89	0.33	20.47	0.41	9:11:21
3	7.09	0	-263.55	-8.87	0.02	-0.01	10664499	20218	7.4	0.5	20.59	0.12	9:17:38
2	7.09	0	-273.04	-9.49	0.02	0	10621585	-42914	7.46	0.06	20.41	-0.17	9:23:56
1	7.09	-0.01	-280.35	-7.31	0.01	0	10714469	92884	8.23	0.77	20.52	0.11	9:30:12
0	7.08	-0.01	-287.53	-7.18	0.01	0	10862321	147852	8.86	0.63	20.74	0.22	9:36:30

pH Min:	7.08
pH Max:	7.1
ORP Min:	-287.53
ORP Max:	-254.68
RDO Min:	0.01
RDO Max:	0.03
Cond Min:	10621585
Cond Max:	10862321
Turb Min:	6.89
Turb Max:	8.86
Temp Min:	20.41
Temp Max:	20.74
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:19:39
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50B-7-18-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/18/2007	8:46:10
Test started on:	7/18/2007	8:46:10
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		9
TOTAL DATA SAMPLES	9	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]

Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/18/2007	8:46:10	0	65.62	30.08	8.2	6.639	-214	7.17	135	-999999.9	-999999.9
7/18/2007	8:52:28	378	66.82	30.08	7	6.639	-225	7.12	97	-999999.9	-999999.9
7/18/2007	8:58:46	756	67.34	30.08	6.1	6.639	-237	7.11	66	-999999.9	-999999.9
7/18/2007	9:05:03	1133	68.1	30.08	6.6	6.639	-246	7.11	45	-999999.9	-999999.9
7/18/2007	9:11:21	1511	68.84	30.08	6.9	6.639	-255	7.1	28	-999999.9	-999999.9
7/18/2007	9:17:38	1888	69.06	30.08	7.4	6.639	-264	7.09	19	-999999.9	-999999.9
7/18/2007	9:23:56	2266	68.75	30.08	7.5	6.639	-273	7.09	17	-999999.9	-999999.9
7/18/2007	9:30:12	2642	68.94	30.08	8.2	6.639	-280	7.09	14	-999999.9	-999999.9
7/18/2007	9:36:30	3020	69.33	30.08	8.9	6.639	-288	7.08	12	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000
07/16/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445.00108
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	214.9 [m]
Pump placement from TOC	157.48 [m]

Well Information:

Well Id	HMW-50C
Well diameter	0.79 [cm]
Well total depth	195.21 [m]
Depth to top of screen	157.09 [m]
Screen length	45.35 [cm]
Depth to Water	117.22 [m]

Pumping information:

Final pumping rate	400 [mL/min]
Flowcell volume	843.36 [mL]
Calculated Sample Rate	127 [sec]
Sample rate	127 [sec]
Stabilized drawdown	0 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	13:30:15	18.33	6.73	10662809.00	3.11	0.00	-288.61
	13:32:27	18.33	6.72	10423866.00	2.52	0.00	-291.79
	13:34:39	18.28	6.71	10260092.00	2.75	0.00	-294.57
	13:36:50	18.25	6.69	10071937.00	3.13	0.00	-295.70
	13:39:01	18.37	6.71	9976920.00	3.40	0.01	-300.03
Variance in last 3 readings	13:34:39	-0.05	-0.01	-163774.00	0.23	0.00	-2.79
	13:36:50	-0.03	-0.02	-188155.00	0.39	0.00	-1.12
	13:39:01	0.12	0.01	-95017.00	0.26	0.00	-4.33

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50C-7-16-2007.flo To Generate a report Insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-50C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	214.9 [m]
Well Depth:	195.21 [m]
Well Diam:	0.79 [cm]
Screen Len:	45.35 [cm]
Screen Depth:	157.09 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	117.22 [m]
Pump Level (TOC):	157.48 [m]

Final Pumping Rate:	400 [mL/min]
Stable Draw Down:	0 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (292.4 mL) - pH_ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	843.36 [mL]
Actual Total Volume:	843.36 [mL]
Calculated Measurement Interval:	127 [sec]
Actual Measurement Interval:	127 [sec]

Start date/time:	7/16/2007	13:17:07
End date/time:	7/16/2007	13:41:04
Total Time:	0:23:57	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.73	0	-288.61	-4.3	0	0	10662809	-249379	3.11	-1.49	18.33	-0.08	13:30:15
3	6.72	-0.01	-291.79	-3.18	0	0	10423866	-238943	2.52	-0.59	18.33	0	13:32:27
2	6.71	-0.01	-294.57	-2.79	0	0	10260092	-163774	2.75	0.23	18.28	-0.05	13:34:39
1	6.69	-0.02	-295.7	-1.12	0	0	10071937	-188155	3.13	0.39	18.25	-0.03	13:36:50
0	6.71	0.01	-300.03	-4.33	0.01	0	9976920	-95017	3.4	0.26	18.37	0.12	13:39:01

pH Min:	6.69
pH Max:	6.73
ORP Min:	-300.03
ORP Max:	-288.61
RDO Min:	0
RDO Max:	0.01
Cond Min:	9976920
Cond Max:	10662809
Turb Min:	2.52
Turb Max:	3.4
Temp Min:	18.25
Temp Max:	18.37

Notes:

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:20:12
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-50C-7-16-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/16/2007	13:17:07
Test started on:	7/16/2007	13:17:07
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:	0	Fahrenheit
Number of data samples:	11	
TOTAL DATA SAMPLES	11	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]

Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/16/2007	13:17:07	0	67.78	30.08	12.1	6.639	-277	6.84	37	-999999.9	-999999.9
7/16/2007	13:19:19	132	66.19	30.08	10.6	6.639	-274	6.78	14	-999999.9	-999999.9
7/16/2007	13:21:29	262	65.47	30.08	8.7	6.639	-273	6.76	9	-999999.9	-999999.9
7/16/2007	13:23:41	394	65.15	30.08	6.9	6.639	-274	6.72	5	-999999.9	-999999.9
7/16/2007	13:25:53	526	65.1	30.08	5.3	6.639	-280	6.73	4	-999999.9	-999999.9
7/16/2007	13:28:04	657	65.13	30.08	4.6	6.639	-284	6.74	3	-999999.9	-999999.9
7/16/2007	13:30:15	788	64.99	30.08	3.1	6.639	-289	6.73	4	-999999.9	-999999.9
7/16/2007	13:32:27	920	64.99	30.08	2.5	6.639	-292	6.72	3	-999999.9	-999999.9
7/16/2007	13:34:39	1052	64.9	30.08	2.7	6.639	-295	6.71	4	-999999.9	-999999.9
7/16/2007	13:36:50	1183	64.84	30.08	3.1	6.639	-296	6.69	3	-999999.9	-999999.9
7/16/2007	13:39:01	1314	65.07	30.08	3.4	6.639	-300	6.71	5	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000
07/13/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445 00108
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	134.51 [m]
Pump placement from TOC	98.43 [m]

Well Information:

Well Id	HMW-52C
Well diameter	0.79 [cm]
Well total depth	131.23 [m]
Depth to top of screen	80.77 [m]
Screen length	68.98 [cm]
Depth to Water	91.67 [m]

Pumping information:

Final pumping rate	480 [mL/min]
Flowcell volume	734 [mL]
Calculated Sample Rate	92 [sec]
Sample rate	92 [sec]
Stabilized drawdown	0.18 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	8:00:56	18.26	6.64	6704291.50	230.05	0.05	-107.11
	8:02:31	18.15	6.64	6711808.50	258.31	0.04	-109.81
	8:04:07	18.04	6.64	6684710.50	274.16	0.04	-112.42
	8:05:42	18.05	6.65	6692082.50	254.51	0.03	-114.86
	8:07:17	18.10	6.65	6706748.50	270.81	0.03	-117.13
Variance in last 3 readings	8:04:07	-0.11	0.00	-27098.00	15.84	-0.01	-2.61
	8:05:42	0.01	0.00	7372.00	-19.65	0.00	-2.44
	8:07:17	0.05	0.00	14666.00	16.30	0.00	-2.27

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-52C-7-13-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	HMW-52C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	134.51 [m]
Well Depth:	131.23 [m]
Well Diam:	0.79 [cm]
Screen Len:	68.98 [cm]
Screen Depth:	80.77 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	91.67 [m]
Pump Level (TOC):	98.43 [m]

Final Pumping Rate:	480 [mL/min]
Stable Draw Down:	0.18 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (183.0 mL) - pH_ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	734 [mL]
Actual Total Volume:	734 [mL]
Calculated Measurement Interval:	92 [sec]
Actual Measurement Interval:	92 [sec]

Start date/time:	7/13/2007	7:54:36
End date/time:	7/13/2007	8:08:33
Total Time:	0:13:57	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.64	0.01	-107.11	-4.46	0.05	-0.02	6704291.5	-1482.5	230.05	-30.53	18.26	-0.01	8:00:56
3	6.64	0	-109.81	-2.7	0.04	-0.01	6711808.5	7517	258.31	28.26	18.15	-0.1	8:02:31
2	6.64	0	-112.42	-2.61	0.04	-0.01	6684710.5	-27098	274.16	15.84	18.04	-0.11	8:04:07
1	6.65	0	-114.86	-2.44	0.03	0	6692082.5	7372	254.51	-19.65	18.05	0.01	8:05:42
0	6.65	0	-117.13	-2.27	0.03	0	6706748.5	14666	270.81	16.3	18.1	0.05	8:07:17

pH Min:	6.64
pH Max:	6.65
ORP Min:	-117.13
ORP Max:	-107.11
RDO Min:	0.03
RDO Max:	0.05
Cond Min:	6684710.5
Cond Max:	6711808.5
Turb Min:	230.05
Turb Max:	274.16
Temp Min:	18.04
Temp Max:	18.26
Notes:	

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:20:53
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-HMW-52C-7-13-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/13/2007	7:54:36
Test started on:	7/13/2007	7:54:36
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		9
TOTAL DATA SAMPLES	9	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/13/2007	7:54:36	0	66.33	30.08	165.1	6.639	-90	6.63	460	-999999.9	-999999.9
7/13/2007	7:56:12	96	65.46	30.08	158.4	6.639	-95	6.63	223	-999999.9	-999999.9
7/13/2007	7:57:47	191	65.21	30.08	177.2	6.639	-100	6.63	121	-999999.9	-999999.9
7/13/2007	7:59:22	286	64.88	30.08	260.6	6.639	-103	6.63	76	-999999.9	-999999.9
7/13/2007	8:00:56	380	64.86	30.08	230	6.639	-107	6.64	55	-999999.9	-999999.9
7/13/2007	8:02:31	475	64.67	30.08	258.3	6.639	-110	6.64	43	-999999.9	-999999.9
7/13/2007	8:04:07	571	64.48	30.08	274.2	6.639	-112	6.64	38	-999999.9	-999999.9
7/13/2007	8:05:42	666	64.49	30.08	254.5	6.639	-115	6.65	34	-999999.9	-999999.9
7/13/2007	8:07:17	761	64.59	30.08	270.8	6.639	-117	6.65	32	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 | **Low-Flow System**
07/12/07 | **ISI Low-Flow Log**

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445 00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	118.11 [m]
Pump placement from TOC	87.6 [m]

Well Information:

Well Id	MP-81C
Well diameter	0.79 [cm]
Well total depth	107.61 [m]
Depth to top of screen	56.27 [m]
Screen length	69.92 [cm]
Depth to Water	81.04 [m]

Pumping information:

Final pumping rate	480 [mL/min]
Flowcell volume	711.68 [mL]
Calculated Sample Rate	89 [sec]
Sample rate	89 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [µg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	12:41:45	17.52	6.70	6621136.50	3.64	940.07	-78.04
	12:43:17	17.54	6.70	6622999.50	3.81	930.84	-83.82
	12:44:49	17.76	6.70	6662223.50	3.63	898.11	-94.09
	12:46:20	18.12	6.69	6703699.50	4.08	886.36	-98.58
	12:47:53	18.63	6.69	6780663.50	4.13	874.61	-95.03
Variance in last 3 readings	12:44:49	0.23	0.00	39224.00	-0.18	-32.73	-10.27
	12:46:20	0.36	0.00	41476.00	0.45	-11.75	-4.49
	12:47:53	0.51	0.00	76964.00	0.04	-11.75	3.55

Notes: DO > 0.3

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-MP-81C-7-12-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	MP-81C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [ug/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	118.11 [m]
Well Depth:	107.61 [m]
Well Diam:	0.79 [cm]
Screen Len:	69.92 [cm]
Screen Depth:	56.27 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	81.04 [m]
Pump Level (TOC):	87.6 [m]

Final Pumping Rate:	480 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (160.7 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	711.68 [mL]
Actual Total Volume:	711.68 [mL]
Calculated Measurement Interval:	89 [sec]
Actual Measurement Interval:	89 [sec]

Start date/time:	7/12/2007	11:55:45
End date/time:	7/12/2007	12:48:41
Total Time:	0:52:56	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [µg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.7	0	-78.04	-1.33	940.07	-22.66	6621136.5	1824.5	3.64	1.78	17.52	0.03	12:41:45
3	6.7	0	-83.82	-5.78	930.84	-9.23	6622999.5	1863	3.81	0.18	17.54	0.02	12:43:17
2	6.7	0	-94.09	-10.27	898.11	-32.73	6662223.5	39224	3.63	-0.18	17.76	0.23	12:44:49
1	6.69	0	-98.58	-4.49	886.36	-11.75	6703699.5	41476	4.08	0.45	18.12	0.36	12:46:20
0	6.69	0	-95.03	3.55	874.61	-11.75	6780663.5	76964	4.13	0.04	18.63	0.51	12:47:53

pH Min:	6.69
pH Max:	6.7
ORP Min:	-98.58
ORP Max:	-78.04
RDO Min:	874.61
RDO Max:	940.07
Cond Min:	6621136.5
Cond Max:	6780663.5
Turb Min:	3.63
Turb Max:	4.13
Temp Min:	17.52
Temp Max:	18.63
Notes:	DO > 0.3

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:21:24
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-MP-81C-7-12-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45367	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/12/2007	11:55:45
Test started on:	7/12/2007	11:55:45
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		35
TOTAL DATA SAMPLES	35	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/12/2007	11:55:45	0	64.7	30.08	39.4	6.639	-134	6.71	1125	-999999.9	-999999.9
7/12/2007	11:57:16	91	64.29	30.08	39.9	6.639	-164	6.71	1312	-999999.9	-999999.9
7/12/2007	11:58:48	183	64.09	30.08	48.5	6.639	-173	6.72	1221	-999999.9	-999999.9
7/12/2007	12:00:20	275	63.98	30.08	39.8	6.639	-172	6.72	1208	-999999.9	-999999.9
7/12/2007	12:01:52	367	63.88	30.08	35.9	6.639	-166	6.72	1142	-999999.9	-999999.9
7/12/2007	12:03:24	459	63.76	30.08	39.8	6.639	-161	6.72	1183	-999999.9	-999999.9
7/12/2007	12:04:56	551	63.63	30.08	32.1	6.639	-154	6.72	1235	-999999.9	-999999.9
7/12/2007	12:06:28	643	63.72	30.08	27.1	6.639	-147	6.72	1276	-999999.9	-999999.9
7/12/2007	12:08:00	735	63.6	30.08	18.5	6.639	-139	6.72	1374	-999999.9	-999999.9
7/12/2007	12:09:32	827	63.61	30.08	14.8	6.639	-132	6.72	1401	-999999.9	-999999.9
7/12/2007	12:11:04	919	63.52	30.08	12.7	6.639	-126	6.72	1440	-999999.9	-999999.9
7/12/2007	12:12:36	1011	63.54	30.08	10.7	6.639	-120	6.72	1473	-999999.9	-999999.9
7/12/2007	12:14:08	1103	63.66	30.08	8.8	6.639	-114	6.71	1472	-999999.9	-999999.9
7/12/2007	12:15:40	1195	63.69	30.08	6.1	6.639	-109	6.71	1479	-999999.9	-999999.9
7/12/2007	12:17:12	1287	63.62	30.08	5.6	6.639	-105	6.71	1458	-999999.9	-999999.9
7/12/2007	12:18:44	1379	63.61	30.08	5	6.639	-94	6.71	1425	-999999.9	-999999.9
7/12/2007	12:20:16	1471	63.55	30.08	4.8	6.639	-85	6.71	1404	-999999.9	-999999.9
7/12/2007	12:21:48	1563	63.5	30.08	4.3	6.639	-84	6.71	1366	-999999.9	-999999.9
7/12/2007	12:23:20	1655	63.4	30.08	3.6	6.639	-82	6.71	1345	-999999.9	-999999.9
7/12/2007	12:24:53	1748	63.48	30.08	3.1	6.639	-81	6.71	1321	-999999.9	-999999.9
7/12/2007	12:26:25	1840	63.45	30.08	3.6	6.639	-82	6.71	1303	-999999.9	-999999.9
7/12/2007	12:27:57	1932	63.4	30.08	2.5	6.639	-79	6.71	1274	-999999.9	-999999.9
7/12/2007	12:29:30	2025	63.49	30.08	2.4	6.639	-74	6.71	1244	-999999.9	-999999.9
7/12/2007	12:31:01	2116	63.55	30.08	2.1	6.639	-68	6.7	1201	-999999.9	-999999.9
7/12/2007	12:32:32	2207	63.49	30.08	1.7	6.639	-66	6.7	1154	-999999.9	-999999.9
7/12/2007	12:34:05	2300	63.53	30.08	2	6.639	-70	6.7	1110	-999999.9	-999999.9
7/12/2007	12:35:37	2392	63.44	30.08	2	6.639	-73	6.7	1068	-999999.9	-999999.9
7/12/2007	12:37:09	2484	63.4	30.08	2.4	6.639	-76	6.7	1033	-999999.9	-999999.9
7/12/2007	12:38:40	2575	63.61	30.08	2	6.639	-76	6.7	995	-999999.9	-999999.9
7/12/2007	12:40:13	2668	63.48	30.08	1.9	6.639	-77	6.7	963	-999999.9	-999999.9
7/12/2007	12:41:45	2760	63.53	30.08	3.6	6.639	-78	6.7	940	-999999.9	-999999.9
7/12/2007	12:43:17	2852	63.57	30.08	3.8	6.639	-84	6.7	931	-999999.9	-999999.9
7/12/2007	12:44:49	2944	63.97	30.08	3.6	6.639	-94	6.7	898	-999999.9	-999999.9
7/12/2007	12:46:20	3035	64.62	30.08	4.1	6.639	-99	6.69	886	-999999.9	-999999.9
7/12/2007	12:47:53	3128	65.53	30.08	4.1	6.639	-95	6.69	875	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/13/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	W_Howland
Company Name	URS
Project Name	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name	Hartford Working Group

Pump Information:

Pump Model/Type	QED Sample Pro #1
Tubing Type	Polyethylene
Tubing Diameter	0.07 [cm]
Tubing Length	127.95 [m]
Pump placement from TOC	100.07 [m]

Well Information:

Well Id	MP-89C
Well diameter	0.79 [cm]
Well total depth	124.67 [m]
Depth to top of screen	75.46 [m]
Screen length	70.87 [cm]
Depth to Water	93.41 [m]

Pumping information:

Final pumping rate	500 [mL/min]
Flowcell volume	725.07 [mL]
Calculated Sample Rate	88 [sec]
Sample rate	88 [sec]
Stabilized drawdown	0.02 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	9:46:20	17.04	6.58	9345252.00	174.36	0.06	-92.85
	9:47:51	17.08	6.58	9355667.00	184.95	0.05	-96.31
	9:49:22	17.15	6.58	9348270.00	175.82	0.05	-99.09
	9:50:53	17.17	6.58	9369119.00	164.41	0.05	-101.69
	9:52:24	17.15	6.58	9350872.00	171.63	0.05	-103.78
Variance in last 3 readings	9:49:22	0.07	0.00	-7397.00	-9.13	0.00	-2.78
	9:50:53	0.02	0.00	20849.00	-11.41	0.00	-2.60
	9:52:24	-0.01	0.00	-18247.00	7.23	0.00	-2.09

Notes:

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-MP-89C-7-13-2007.flo To Generate a report insert a new sheet based on a sheet template. See 'Sheet Template' and 'Insert a new sheet thats based on a custom template' in Excel help. An example template, InSituLowFlow.xlt, is provided by the Win-Situ® Installation. You may copy this template from the templates subfolder in

Operator Name:	W Howland
Company Name:	URS
Project Name:	Hartford Quarterly Groundwater Sampling - 21561445.00106
Site Name:	Hartford Working Group
Well ID:	MP-89C

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED Sample Pro #1
Tubing Type:	Polyethylene
Tubing Diam:	0.07 [cm]
Tubing Length:	127.95 [m]
Well Depth:	124.67 [m]
Well Diam:	0.79 [cm]
Screen Len:	70.87 [cm]
Screen Depth:	75.46 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	93.41 [m]
Pump Level (TOC):	100.07 [m]

Final Pumping Rate:	500 [mL/min]
Stable Draw Down:	0.02 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (174.1 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	725.07 [mL]
Actual Total Volume:	725.07 [mL]
Calculated Measurement Interval:	88 [sec]
Actual Measurement Interval:	88 [sec]

Start date/time:	7/13/2007	9:32:41
End date/time:	7/13/2007	9:53:44
Total Time:	0:21:03	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.58	0	-92.85	-3.68	0.06	0	9345252	10377	174.36	4.49	17.04	0	9:46:20
3	6.58	0	-96.31	-3.46	0.05	-0.01	9355667	10415	184.95	10.59	17.08	0.05	9:47:51
2	6.58	0	-99.09	-2.78	0.05	0	9348270	-7397	175.82	-9.13	17.15	0.07	9:49:22
1	6.58	0	-101.69	-2.6	0.05	0	9369119	20849	164.41	-11.41	17.17	0.02	9:50:53
0	6.58	0	-103.78	-2.09	0.05	0	9350872	-18247	171.63	7.23	17.15	-0.01	9:52:24

pH Min:	6.58
pH Max:	6.58
ORP Min:	-103.78
ORP Max:	-92.85
RDO Min:	0.05
RDO Max:	0.06
Cond Min:	9345252
Cond Max:	9369119
Turb Min:	164.41
Turb Max:	184.95
Temp Min:	17.04
Temp Max:	17.17
Notes:	

Device Record:

In-Situ Inc.	Troll 9000 Pro XP
Report generated:	7/20/2007 13:22:09
Report from file:	...\Hartford Quarterly Groundwater Sampling - 21561445.00106-Hartford Working Group-MP-89C-7-13-2007.flo.bin
Win-Situ® Version	4.57.0.0
Serial number:	45367
Firmware Version	2
Unit name:	MP Troll 9000
Test name:	LowFlow
Test defined on:	7/13/2007 9:32:41
Test started on:	7/13/2007 9:32:41
Test stopped on:	N/A N/A

Data gathered using Event testing

Time between data points:	0.0	Seconds.
Time between default storages:	0.0	Seconds.
Monitoring data on channel [1]		
Data stored if delta value exceeds:	0	Fahrenheit
Number of data samples:	14	
TOTAL DATA SAMPLES	14	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity, Low Range
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/13/2007	9:32:41	0	63.54	30.08	106.5	6.639	-30	6.57	578	-999999.9	-999999.9
7/13/2007	9:34:12	91	63.18	30.08	126.4	6.639	-42	6.57	283	-999999.9	-999999.9
7/13/2007	9:35:43	182	62.98	30.08	140.2	6.639	-52	6.57	170	-999999.9	-999999.9
7/13/2007	9:37:14	273	62.85	30.08	154.4	6.639	-60	6.57	114	-999999.9	-999999.9
7/13/2007	9:38:44	363	62.85	30.08	162.4	6.639	-67	6.57	97	-999999.9	-999999.9
7/13/2007	9:40:16	455	62.83	30.08	177.2	6.639	-73	6.57	88	-999999.9	-999999.9
7/13/2007	9:41:47	546	62.81	30.08	163.4	6.639	-79	6.58	81	-999999.9	-999999.9
7/13/2007	9:43:18	637	62.72	30.08	170.7	6.639	-85	6.58	66	-999999.9	-999999.9
7/13/2007	9:44:49	728	62.67	30.08	169.9	6.639	-89	6.58	61	-999999.9	-999999.9
7/13/2007	9:46:20	819	62.67	30.08	174.4	6.639	-93	6.58	61	-999999.9	-999999.9
7/13/2007	9:47:51	910	62.75	30.08	184.9	6.639	-96	6.58	53	-999999.9	-999999.9
7/13/2007	9:49:22	1001	62.87	30.08	175.8	6.639	-99	6.58	52	-999999.9	-999999.9
7/13/2007	9:50:53	1092	62.9	30.08	164.4	6.639	-102	6.58	49	-999999.9	-999999.9
7/13/2007	9:52:24	1183	62.88	30.08	171.6	6.639	-104	6.58	49	-999999.9	-999999.9

URS

In-Situ Inc.

Troll 9000 07/12/07

Low-Flow System
ISI Low-Flow Log

Project Information:

Operator Name	B_HIGGINS
Company Name	URS
Project Name	HARTFORD QUARTERLY GW SAMPLING-21561445 00106
Site Name	HARTFORD WORKING GROUP

Pump Information:

Pump Model/Type	QED SAMPLE SAMPLE PRO
Tubing Type	POLYETHYLENE
Tubing Diameter	0.07 [cm]
Tubing Length	124.67 [m]
Pump placement from TOC	96.78 [m]

Well Information:

Well Id	MP-92D
Well diameter	0.79 [cm]
Well total depth	124.02 [m]
Depth to top of screen	74.48 [m]
Screen length	68.5 [cm]
Depth to Water	90.29 [m]

Pumping information:

Final pumping rate	390 [mL/min]
Flowcell volume	720.61 [mL]
Calculated Sample Rate	111 [sec]
Sample rate	111 [sec]
Stabilized drawdown	0.04 [cm]

Low-Flow Sampling Stabilization Summary

	Time	Temp [C]	pH [pH]	Cond [µS/cm]	Turb [NTU]	RDO [mg/L]	ORP [mV]
Stabilization Settings			+/-0.1	+/-0.1 +/-3 %	+/-1 +/-10 %	+/-0.3	+/-10
Last 5 Readings	15:19:00	18.29	6.62	1172.46	11.98	0.02	-368.56
	15:20:52	18.28	6.62	1171.22	12.81	0.02	-367.88
	15:22:44	18.22	6.62	1167.82	10.36	0.02	-369.16
	15:24:36	18.41	6.62	1166.90	9.04	0.02	-370.40
	15:26:27	18.31	6.63	1160.45	9.98	0.02	-371.18
Variance in last 3 readings	15:22:44	-0.06	0.00	-3.40	-2.45	0.00	-1.29
	15:24:36	0.19	0.00	-0.92	-1.32	0.00	-1.24
	15:26:27	-0.10	0.00	-6.44	0.94	0.00	-0.77

Notes: LAST 3 TURB READINGS BELOW 10

INSTRUCTIONS: This is the raw data export format from the Win-Situ® Low Flow Cell data file:HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-MP-92D-7-12-2007.flo To Generate a report insert a new sheet

Operator Name:	B HIGGINS
Company Name:	URS
Project Name:	HARTFORD QUARTERLY GW SAMPLING-21561445.00106
Site Name:	HARTFORD WORKING GROUP
Well ID:	MP-92D

pH Sensor:	Installed	Target Value	0.1 [pH]	Target Pecent	0 [%]
ORP Sensor:	Installed	Target Value	10 [mV]	Target Pecent	0 [%]
RDO Sensor:	Installed	Target Value	0.3 [mg/L]	Target Pecent	0 [%]
Cond Sensor:	Installed	Target Value	0.1 [µS/cm]	Target Pecent	3 [%]
Turb Sensor:	Installed	Target Value	1 [NTU]	Target Pecent	10 [%]

Pump Model/Type:	QED SAMPLE SAMPLE PRO
Tubing Type:	POLYETHYLENE
Tubing Diam:	0.07 [cm]
Tubing Length:	124.67 [m]
Well Depth:	124.02 [m]
Well Diam:	0.79 [cm]
Screen Len:	68.5 [cm]
Screen Depth:	74.48 [m]
Pump Inlet Depth:	0 [cm]
Depth to Water:	90.29 [m]
Pump Level (TOC):	96.78 [m]

Final Pumping Rate:	390 [mL/min]
Stable Draw Down:	0.04 [cm]
Total Volume Formula:	Volume = cup (675 mL) + tubing (169.6 mL) - pH ORP (16 mL) - RDO (55 mL) - Cond (13 mL) - Turb (40 mL)
Calculated Total Volume:	720.61 [mL]
Actual Total Volume:	720.61 [mL]
Calculated Measurement Interval:	111 [sec]
Actual Measurement Interval:	111 [sec]

Start date/time:	7/12/2007	14:50:59
End date/time:	7/12/2007	15:27:06
Total Time:	0:36:07	

Reading #	pH [pH]	Variance	ORP [mV]	Variance	RDO [mg/L]	Variance	Cond [µS/cm]	Variance	Turb [NTU]	Variance	Temp [C]	Variance	Time
4	6.62	0	-368.56	-2.95	0.02	0	1172.46	-3.43	11.98	-1.04	18.29	0.04	15:19:00
3	6.62	0	-367.88	0.68	0.02	0	1171.22	-1.24	12.81	0.83	18.28	-0.02	15:20:52
2	6.62	0	-369.16	-1.29	0.02	0	1167.82	-3.4	10.36	-2.45	18.22	-0.06	15:22:44
1	6.62	0	-370.4	-1.24	0.02	0	1166.9	-0.92	9.04	-1.32	18.41	0.19	15:24:36
0	6.63	0	-371.18	-0.77	0.02	0	1160.45	-6.44	9.98	0.94	18.31	-0.1	15:26:27

pH Min:	6.62
pH Max:	6.63
ORP Min:	-371.18
ORP Max:	-367.88
RDO Min:	0.02
RDO Max:	0.02
Cond Min:	1160.45
Cond Max:	1172.46
Turb Min:	9.04
Turb Max:	12.81
Temp Min:	18.22
Temp Max:	18.41
Notes:	LAST 3 TURB READINGS BELOW 10

Device Record:		
In-Situ Inc.	Troll 9000 Pro XP	
Report generated:	7/20/2007	13:24:43
Report from file:	...\HARTFORD QUARTERLY GW SAMPLING-21561445.00106-HARTFORD WORKING GROUP-MP-92D-7-12-2007.flo.bin	
Win-Situ® Version	4.57.0.0	
Serial number:	45289	
Firmware Version	2	
Unit name:	MP Troll 9000	
Test name:		LowFlow
Test defined on:	7/12/2007	14:50:59
Test started on:	7/12/2007	14:50:59
Test stopped on:	N/A	N/A
Data gathered using Event testing		
Time between data points: 0.0	Seconds.	
Time between default storages: 0.0	Seconds.	
Monitoring data on channel [1]		
Data stored if delta value exceeds:		0 Fahrenheit
Number of data samples:		20
TOTAL DATA SAMPLES	20	

Channel number [1]	
Measurement type:	Temperature
Channel name:	
Channel number [3]	
Measurement type:	Barometric Pressure
Channel name:	
Channel number [4]	
Measurement type:	Turbidity
Channel name:	
Channel number [5]	
Measurement type:	Battery Voltage
Channel name:	
Channel number [11]	
Measurement type:	ORP
Channel name:	
Channel number [12]	
Measurement type:	pH
Channel name:	

Channel number [36]
Measurement type: Rugged Dissolved Oxygen
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [36]
Measurement type: RDO %Saturation
Channel name:
Fixed Salinity(PSU): 0.00 PSU

Channel number [45]
Measurement type: Conductivity
Channel name:

Date	Time	ET (sec)	Chan[1] Temperature Fahrenheit	Chan[3] Barometric Inches Hg	Chan[4] Turbidity FNU	Chan[5] Battery Volts	Chan[11] ORP millivolts	Chan[12] pH pH	Chan[36] Rugged DO micrograms/L	Chan[36] Rugged DO Sat %Saturation	Chan[45] Conductivity microSiemens/cm Actual Conductivity
7/12/2007	14:50:59	0	67.43	30.08	94.5	6.639	-273	6.62	518	5.653	1224.27
7/12/2007	14:52:50	111	66.71	30.08	109.2	6.639	-304	6.62	239	2.591	1207.24
7/12/2007	14:54:42	223	66.03	30.08	108.2	6.639	-325	6.62	129	1.381	1204.02
7/12/2007	14:56:34	335	65.82	30.08	92.5	6.639	-337	6.62	76	0.8109	1198.21
7/12/2007	14:58:28	449	65.5	30.08	86.9	6.639	-345	6.63	53	0.566	1196.33
7/12/2007	15:00:20	561	65.36	30.08	61.7	6.639	-348	6.63	40	0.4219	1187.36
7/12/2007	15:02:12	673	65.2	30.08	52.3	6.639	-340	6.61	40	0.4211	1181.68
7/12/2007	15:04:04	785	65.04	30.08	49.3	6.639	-342	6.59	42	0.4471	1181.09
7/12/2007	15:05:56	897	65.05	30.08	33.4	6.639	-349	6.59	35	0.3758	1181.44
7/12/2007	15:07:47	1008	64.95	30.08	36.2	6.639	-355	6.6	26	0.2774	1182.42
7/12/2007	15:09:39	1120	64.98	30.08	26.6	6.639	-358	6.6	26	0.2775	1181.5
7/12/2007	15:11:31	1232	64.86	30.08	25.1	6.639	-360	6.61	26	0.2771	1179.62
7/12/2007	15:13:23	1344	64.76	30.08	20	6.639	-362	6.61	24	0.2501	1175.55
7/12/2007	15:15:15	1456	64.87	30.08	16.8	6.639	-364	6.62	19	0.2059	1177.13
7/12/2007	15:17:08	1569	64.86	30.08	13	6.639	-366	6.62	20	0.2148	1175.89
7/12/2007	15:19:00	1681	64.93	30.08	12	6.639	-369	6.62	19	0.1971	1172.46
7/12/2007	15:20:52	1793	64.9	30.08	12.8	6.639	-368	6.62	19	0.206	1171.22
7/12/2007	15:22:44	1905	64.8	30.08	10.4	6.639	-369	6.62	18	0.188	1167.82
7/12/2007	15:24:36	2017	65.13	30.08	9	6.639	-370	6.62	20	0.2155	1166.9
7/12/2007	15:26:27	2128	64.96	30.08	10	6.639	-371	6.63	19	0.2061	1160.45

Well Sampling Indicator Parameters - July 2007 Quarterly Sampling
The Hartford Area Hydrocarbon Plume Site

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well Number	Date	Time	DTW (ft)	Temperature (°C)	pH (std. units)	Conductivity (mS/cm)	TDS (ppm)	Turbidity (ntu)	Dissolved Oxygen (mg/L)	Visual Clarity	Comments
HMW-26	07/13/07	1107	23.91	22.54	6.56	8227000	NM	2284	0.61	Cloudy	Well low flow sampled, but Indicator Parameters not saved in Rugged Reader
		1110	23.91	20.12	6.59	7808000	NM	2049	0.21	Cloudy	
		1111	23.91	19.23	6.60	7841000	NM	2284	0.08	Cloudy	
		1113	23.91	18.97	6.60	8086000	NM	2284	0.04	Cloudy	
		1115	23.91	18.91	6.59	8329000	NM	2284	0.02	Clear	
		1117	23.91	18.70	6.59	8482000	NM	2284	0.02	Clear	
		1119	23.91	18.68	6.59	8600000	NM	2284	0.02	Clear	
		1121	23.91	18.74	6.58	8709000	NM	2284	0.01	Clear	
		1123	23.91	18.81	6.57	8760000	NM	2284	0.02	Clear	

NOTES:
°C = degrees Centigrade
gals = gallons
mg/L = milligrams per liter
NM = Not measured
ntu = nephelometric turbidity units
ppm = parts per million
mS/cm = microsiemens per centimeter

APPENDIXE Four Quarters of Groundwater Analytical Results

APPENDIXE Four Quarters of Groundwater Analytical Results

E-1

BTEX and MTBE

Table E-1
Four Quarters of Groundwater Analytical Results - BTEX and MTBE

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Constituent				
		Benzene	Ethylbenzene	Methyl tert-butyl ether	Toluene	Xylene (total)
TACO Comparison Value		5 ug/l	700 ug/l	70 ug/l	1000 ug/l	10000 ug/l
HMW-25[1]	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-25	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-25	10/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-25[1]	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-25	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-25	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-25	7/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-26	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-26[1]	10/11/2006	2 U	5 U	0.9 J	5 U	5 U
HMW-26	10/11/2006	2 U	5 U	0.9 J	5 U	5 U
HMW-26	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-26	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-26	7/11/2006					
HMW-26	7/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-27	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-27	10/12/2006	2 U	5 U	2 U	5 U	5 U
HMW-27	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-27	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-27	7/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-28	1/15/2007	2 UR	5 UR	2 U	5 U	5 UR
HMW-28	10/12/2006	2 U	5 U	2 U	5 U	5 U
HMW-28	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-28[1]	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-28	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-28	7/16/2007	2 U	5 U	2 U	5 U	5 U
HMW-29	1/16/2007	2 U	5 UR	2 U	5 U	5 U
HMW-29	10/12/2006	2 U	5 U	2 U	5 U	5 U
HMW-29	4/16/2007	2 U	5 U	2 U	5 U	5 U
HMW-29	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-29	7/16/2007	2 U	5 U	2 U	5 U	5 U
HMW-39B	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-39B	10/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-39B	4/13/2007	2 U	5 U	2 U	5 U	5 U

Table E-1
Four Quarters of Groundwater Analytical Results - BTEX and MTBE

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Constituent				
		Benzene	Ethylbenzene	Methyl tert-butyl ether	Toluene	Xylene (total)
TACO Comparison Value		5 ug/l	700 ug/l	70 ug/l	1000 ug/l	10000 ug/l
HMW-39B	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-39B	7/23/2007	2 U	5 U	2 U	5 U	5 U
HMW-39C[1]	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-39C	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-39C	10/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-39C	4/16/2007	2 U	5 U	2 U	5 U	5 U
HMW-39C	7/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-39C	7/20/2007	2 U	5 U	2 U	5 U	5 U
HMW-40C	1/16/2007	2 U	5 U	2 U	5 U	5 U
HMW-40C[1]	10/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-40C	10/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-40C[1]	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-40C	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-40C	7/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-40C	7/12/2007	2 U	5 U	2 U	5 U	5 U
HMW-49B	1/15/2007	731	391	10 U	25 U	51.8
HMW-49B	4/16/2007	90	483	10 U	25 U	58.7
HMW-49C	1/16/2007	304	2220	404	1600	5940
HMW-49C	10/11/2006	267	3740	818	6350	9640
HMW-49C	4/16/2007	1010	1890	152	310	5270
HMW-49C	7/10/2006	592	2180	100 U	2500	5230
HMW-49C	7/18/2007	250	150	317	289	237
HMW-49D	1/16/2007	116	1.8 J	37.2	6.7	10.3
HMW-49D[1]	10/10/2006	109	2.4 J	37	7.6	10.9
HMW-49D	10/10/2006	108	2.6 J	46.6	6.9	10.5
HMW-49D	4/16/2007	84.4	1.6 J	44.4	4.7 J	6.7
HMW-49D[1]	7/10/2006	318	4.2 J	47	12.2	15.3
HMW-49D	7/10/2006	339	4.1 J	49.2	12	15.2
HMW-49D[1]	7/16/2007	444	1.5 J	84.6	5.6	6.6
HMW-49D	7/16/2007	451	1.4 J	81.3	5.2	6.3
HMW-50A	1/16/2007	2 UR	5 U	2 U	5 U	5 UR
HMW-50A	10/10/2006	2 U	5 U	2 U	5 U	5 U

Table E-1
Four Quarters of Groundwater Analytical Results - BTEX and MTBE

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Constituent				
		Benzene	Ethylbenzene	Methyl tert-butyl ether	Toluene	Xylene (total)
TACO Comparison Value		5 ug/l	700 ug/l	70 ug/l	1000 ug/l	10000 ug/l
HMW-50A	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-50A	7/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-50A	7/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-50B[1]	1/15/2007	2 U	5 U	2 U	5 U	5 U
HMW-50B	1/15/2007	2 U	5 UR	2 U	5 U	5 U
HMW-50B	10/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-50B	4/13/2007	0.7 J	5 U	2 U	5 U	5 U
HMW-50B	7/11/2006	2 U	5 U	2 U	5 U	5 U
HMW-50B	7/18/2007	2 U	5 U	2 U	5 U	5 U
HMW-50C	1/16/2007	127	5 U	6.3	8.5	9.1
HMW-50C	10/9/2006	77.8	5 U	3.8	4.7 J	6.7
HMW-50C[1]	4/16/2007	153	5 U	7.8	9	12.9
HMW-50C	4/16/2007	141	5 U	7.3	8.2	10.9
HMW-50C	7/10/2006	99.1	5 U	2 U	6.2	11.8
HMW-50C[1]	7/16/2007	160 S	1 J	23.7	10.9	17.7
HMW-50C	7/16/2007	158	1 J	22.9	10.8	16.5
HMW-52C	1/17/2007	2 U	5 U	2 U	5 U	5 U
HMW-52C	10/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-52C	4/13/2007	2 U	5 U	2 U	5 U	5 U
HMW-52C	7/10/2006	2 U	5 U	2 U	5 U	5 U
HMW-52C	7/13/2007	2 U	5 U	2 U	5 U	5 U
MP-81C	1/16/2007	2 U	5 U	2 U	5 U	5 U
MP-81C	10/11/2006	2 U	5 U	2 U	5 U	5 U
MP-81C	4/16/2007	2 U	5 U	2 U	5 U	5 U
MP-81C	7/11/2006	2 U	5 U	2 U	5 U	5 U
MP-81C	7/12/2007	2 U	5 U	2 U	5 U	5 U
MP-89A	4/13/2007	2 U	5 U	2 U	5 U	5 U
MP-89A	7/18/2007	2 U	5 U	2 U	5 U	5 U
MP-89C	1/16/2007	2 U	5 U	2 U	5 U	5 U
MP-89C	10/11/2006	2 U	5 U	2 U	5 U	5 U
MP-89C	4/16/2007	2 U	5 U	2 U	5 U	5 U
MP-89C	7/11/2006	2 U	5 U	2 U	5 U	5 U
MP-89C	7/13/2007	2 U	5 U	2 U	5 U	5 U

Table E-1
Four Quarters of Groundwater Analytical Results - BTEX and MTBE

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Constituent				
		Benzene	Ethylbenzene	Methyl tert-butyl ether	Toluene	Xylene (total)
TACO Comparison Values		5 ug/l	700 ug/l	70 ug/l	1000 ug/l	10000 ug/l
MP-92D	1/16/2007	2 U	5 U	2 U	5 U	5 U
MP-92D	10/11/2006	2 U	5 U	2 U	5 U	5 U
MP-92D	4/16/2007	2 U	5 U	2 U	5 U	5 U
MP-92D[1]	7/11/2006	2 U	5 U	2 U	5 U	5 U
MP-92D	7/11/2006	2 U	5 U	2 U	5 U	5 U
MP-92D	7/12/2007	2 U	5 U	2 U	5 U	5 U

Notes

[1] = Denotes Duplicate Sample
U= Not Detected (value preceding "U" denotes detection limit)
J= Estimated value.
R= RPD outside accepted recovery limits
S= Spike Recovery outside accepted recovery limits
H= Holding time exceeded
All units are in ug/L-micrograms per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

E-2

Metals (Total and Dissolved)

Table E-2
Four Quarters of Groundwater Analytical Results - Metals (Total and Dissolved)

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Antimony	Antimony (Dissolved)	Arsenic	Arsenic (Dissolved)	Barium	Barium (Dissolved)	Beryllium	Beryllium (Dissolved)	Cadmium	Cadmium (Dissolved)	Chromium	Chromium (Dissolved)	Cobalt	Cobalt (Dissolved)	Iron	Iron (Dissolved)	Lead	Lead (Dissolved)	Mercury	Mercury (Dissolved)	Nickel	Nickel (Dissolved)	Selenium	Selenium (Dissolved)	Silver	Silver (Dissolved)	Vanadium	Vanadium (Dissolved)	Zinc	Zinc (Dissolved)
		Constituent																													
TACO Comparison Value		0.006 mg/l	0.006 mg/l	0.05 mg/l	0.05 mg/l	2 mg/l	2 mg/l	0.004 mg/l	0.004 mg/l	0.005 mg/l	0.005 mg/l	0.1 mg/l	0.1 mg/l	1 mg/l	1 mg/l	5 mg/l	5 mg/l	0.0075 mg/l	0.0075 mg/l	0.002 mg/l	0.002 mg/l	0.1 mg/l	0.1 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.049 mg/l	0.049 mg/l	5 mg/l	5 mg/l
HMW-25[1]	1/15/2007	0.005 U	0.002 J	0.003 U	0.003 U	0.285	0.277	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0095 J	0.0093 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0025 J	0.0028 J
HMW-25	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.28	0.274	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.02 U	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0095 J	0.0091 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0045 J
HMW-25	10/11/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.268	0.248	0.001 U	0.001 U	0.0003 J	0.002 U	0.01 U	0.0049 J	0.01 U	0.0023 J	0.0398	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0056 J	0.0079 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0082 J	0.01 U	0.01 U	0.01 U
HMW-25[1]	4/13/2007	0.005 U	0.005 U	0.0009 J	0.001 J	0.253	0.247	0.001 U	0.001 U	0.002 U	0.0005 J	0.01 U	0.01 U	0.0023 J	0.0036 J	0.0704	0.0353	0.0055 S	0.002 U	0.0002 U	0.0002 U	0.0093 J	0.0089 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0039 J	0.0022 J
HMW-25	4/13/2007	0.005 U	0.005 U	0.0009 J	0.001 J	0.256	0.246	0.001 U	0.001 U	0.0007 J	0.002 U	0.01 U	0.01 U	0.0024 J	0.01 U	0.149	0.0329	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0094 J	0.0089 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0056 J	0.01 U
HMW-25	7/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.292	0.271	0.001 U	0.001 U	0.0019 J	0.0013 J	0.0048 J	0.01 U	0.0058 J	0.0044 J	0.0211	0.02 U	0.0004 J	0.002 U	0.0002 U	0.0002 U	0.0172	0.0158	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0038 J	0.01 U
HMW-25	7/13/2007	0.0021 U	0.0024 J	0.0009 J	0.003 U	0.245	0.229	0.001 U	0.001 U	0.0005 J	0.0007 J	0.01 U	0.01 U	0.0027 J	0.0029 J	0.328	0.0076 J	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0067 J	0.0056 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.009 U	0.0174
HMW-26	1/15/2007	0.005 U	0.005 U	0.0044	0.0025 J	0.171	0.163	0.001 U	0.001 U	0.0005 J	0.002 U	0.01 U	0.01 U	0.01 U	0.0025 J	25.3	24.4	0.002 U	0.0008 J	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0032 J	0.01 U	0.0033 J	0.0023 J
HMW-26[1]	10/11/2006	0.005 U	0.005 U	0.0048	0.0046	0.168	0.152	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0059 J	0.01 U	0.01 U	21.3 S	21.5	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 US	0.006 US	0.01 U	0.01 U	0.01 U	0.0117	0.01 U	0.01 U
HMW-26	10/11/2006	0.005 U	0.005 U	0.0037	0.0039	0.167	0.155	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0061 J	0.01 U	0.01 U	22.1	21.8	0.0007 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0092 J	0.0046 J	0.01 U	0.01 U
HMW-26	4/13/2007	0.005 U	0.005 U	0.0042	0.0059	0.204	0.193	0.001 U	0.001 U	0.0004 J	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	29.3	33.1	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0044 J	0.0022 J
HMW-26	7/10/2006		0.005 U		0.0036		0.173		0.001 U		0.001 J		0.0054 J		0.0066 J		20.8		0.002 U		0.0002 U		0.0134		0.006 U		0.01 U		0.01 U		0.0025 J
HMW-26	7/11/2006	0.005 U		0.0022 J		0.191		0.001 U		0.0017 J		0.01 U		0.01 U		23.3 S		0.0006 J		0.0002 U		0.0064 J		0.006 U		0.01 U		0.01 U		0.0098 J	
HMW-26	7/13/2007	0.002 U	0.0023 J	0.0039	0.0018 J	0.161	0.139	0.001 U	0.001 U	0.0014 J	0.0014 J	0.01 U	0.01 U	0.01 U	0.01 U	26	24.4	0.002 U	0.002 U	0.0002 U	0.0002 U	0.004 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0036 J	0.0042 J	0.0112 U	0.0048 J
HMW-27	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.166	0.158	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.005 J	0.0072 J	3.07	2.58	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0096 J	0.0105	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0055 J	0.0058 J
HMW-27	10/12/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.101	0.102	0.001 U	0.001 U	0.0005 J	0.0007 J	0.01 U	0.01 U	0.009 J	0.0054 J	0.617	0.167	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0125	0.0119	0.006 US	0.006 US	0.01 U	0.01 U	0.01 U	0.0059 J	0.0132	0.01 U
HMW-27	4/13/2007	0.005 U	0.005 U	0.0022 J	0.0025 J	0.167	0.156	0.001 U	0.001 U	0.0003 J	0.002 U	0.01 U	0.01 U	0.0051 J	0.0033 J	3.78	2.6	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0092 J	0.0087 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0213	0.0048 J
HMW-27	7/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.108	0.0945	0.001 U	0.001 U	0.0018 J	0.001 J	0.0049 J	0.0052 J	0.0145	0.0116	1.11	0.181	0.0017 J	0.002 U	0.0002 U	0.0002 U	0.0247	0.0209	0.0083	0.008	0.0051 J	0.0049 J	0.01 U	0.01 U	0.0297	0.005 J
HMW-27	7/13/2007	0.002 U	0.0026 J	0.003 U	0.003 U	0.0995	0.0997	0.001 U	0.001 U	0.0004 J	0.0008 J	0.01 U	0.01 U	0.0067 J	0.008 J	0.418	0.358	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0129	0.0124	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0186 U	0.007 J
HMW-28	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.0961	0.0941	0.001 U	0.001 U	0.0004 J	0.002 U	0.01 U	0.01 U	0.0111	0.0115	0.0496	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0204	0.021	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0077 J	0.0068 J
HMW-28	10/12/2006	0.005 U	0.0023 J	0.003 U	0.003 U	0.0891	0.0915	0.001 U	0.001 U	0.0006 J	0.002 U	0.01 U	0.01 U	0.0056 J	0.0098 J	0.02 U	0.02 U	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.0153	0.0145	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0088 J	0.0086 J	0.01 U
HMW-28	4/13/2007	0.005 U	0.005 U	0.0007 J	0.003 US	0.104	0.0959	0.001 U	0.001 U	0.0006 J	0.0004 J	0.01 U	0.01 U	0.0212	0.0104	0.0922	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0214	0.0199	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0075 J	0.0053 J
HMW-28[1]	7/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.0922	0.0828	0.001 U	0.001 U	0.0013 J	0.0013 J	0.0047 J	0.0041 J	0.0133	0.0126	0.016 J	0.02 U	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.0243	0.0222	0.0251	0.021	0.0048 J	0.01 U	0.01 U	0.01 U	0.0062 J	0.0072 J
HMW-28	7/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.0924	0.0837	0.001 U	0.001 U	0.0012 J	0.0007 J	0.0043 J	0.004 J	0.0151	0.0149	0.019 J	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0247	0.0234	0.027	0.0171	0.0035 J	0.01 U	0.01 U	0.01 U	0.0063 J	0.0063 J
HMW-28	7/16/2007	0.005 U	0.0029 U	0.003 U	0.003 U	0.0913	0.0973	0.001 U	0.001 U	0.0006 U	0.0005 J	0.01 U	0.01 U	0.0104	0.0037 J	0.101	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0168	0.0146	0.0244	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0079 U	0.0053 U
HMW-29	1/16/2007	0.005 U	0.005 U	0.0018 J	0.001 J	0.126	0.126	0.001 U	0.001 U	0.0006 J	0.002 U	0.01 U	0.0048 J	0.01 U	0.01 U	6.48 S	6.74	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0039 J	0.0041 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0074 J	0.0093 J	0.0063 J
HMW-29	10/12/2006	0.005 U	0.005 U	0.0018 J	0.0017 J	0.132	0.132	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.0043 J	8.57	7.01	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0085 J	0.01 U	0.0021 J
HMW-29	4/16/2007	0.002 J	0.005 U	0.0044	0.0044	0.136	0.148	0.001 U	0.001 U	0.0008 J	0.0004 J	0.01 U	0.01 U	0.01 U	0.01 U	11.7 S	7.83 S	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.0052 J	0.0044 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0034 J	0.01 U	0.024	0.0075 J
HMW-29	7/10/2006	0.005 U	0.003 J	0.0026 J	0.0015 J	0.147	0.122	0.001 U	0.001 U	0.0013 J	0.0013 J	0.0057 J	0.0054 J	0.006 J	0.0073 J	9.62	6.03	0.0013 J	0.002 U	0.0002 U	0.0002 U	0.0115	0.0079 J	0.006 U	0.006 U	0.0043 J	0.004 J	0.01 U	0.01 U	0.0118	0.0047 J
HMW-29	7/16/2007	0.005 U	0.005 U	0.0022 J	0.0012 J	0.1	0.123	0.001 U	0.001 U	0.0012 U	0.001 J	0.01 U	0.01 U	0.0033 J	0.0044 J	5.07	4.93	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0063 J	0.0071 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0111 U	0.0077 U
HMW-39B	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.229	0.233	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0722	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0208	0.0234
HMW-39B	10/10/2006	0.005 U	0.005 U	0.0008 J	0.003 U	0.313	0.181	0.001 U	0.001 U	0.002 U	0.002 U	0.0078 J	0.0049 J	0.0025 J	0.01 U	6.49	0.0099 J	0.0048	0.0008 J	0.0002 U	0.0002 U	0.0052 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0094 J	0.0155	0.0694	0.017
HMW-39B	4/13/2007	0.005 U	0.005 U	0.0013 J	0.0012 J	0.268	0.281	0.001 U	0.001 U	0.002 U	0.0003 J	0.01 U	0.01 U	0.01 U	0.01 U	0.0437	0.17	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0119	0.0129
HMW-39B	7/10/2006	0.005 U	0.005 U	0.0095	0.003 U	0.506	0.225	0.0007 J	0.001 U	0.0009 J	0.0004 J	0.0298	0.004 J	0.0125	0.0046 J	29.3	0.02 U	0.0183	0.002 U	0.0002 U	0.0002 U	0.0399	0.0052 J	0.006 U	0.006 U	0.01 U	0.0032 J	0.0479	0.01 U	0.176	0.0106
HMW-39B	7/23/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.367	0.401	0.001 U	0.001 U	0.0011 U	0.0006 U	0.0046 J	0.01 U	0.0026 U	0.0022 U	0.0223	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0057 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0051 J	0.023	0.0122
HMW-39C[1]	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.341	0.334	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.0023 J	3.9	3.26	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0379	0.0193
HMW-39C	1/15/2007	0.005 U	0.0021 J	0.003 U	0.003 U	0.327	0.336	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	3.82	3.26	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0393	0.0196
HMW-39C	10/11/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.33	0.328	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	4.26	3.96	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.006 J	0.01 U	0.01 U	0.01 U
HMW-39C	4/16/2007	0.005 U	0.005 U	0.003 U	0.0013 J	0.314	0.275	0.001 U	0.001 U	0.0006 J	0.0005 J	0.01 U	0.01 U	0.01 U	0.01 U	4.47	3.25	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0291	0.0257
HMW-39C	7/11/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.348	0.318	0.001 U	0.001 U	0.0003 J	0.0004 J	0.01 U	0.01 U	0.01 U	0.01 U	3.97	3.5	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0116	0.0037 J
HMW-39C	7/20/2007	0.005 U	0.005 U	0.0009 J	0.003 U	0.422	0.447	0.001 U	0.001 U	0.0007 J	0.0012 J	0.01 U	0.01 U	0.0025 J	0.01 U	5.22	5.54	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0035 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0151	0.0067 J
HMW-40C	1/16/2007	0.005 U	0.005 U	0.44	0.02	0.843	0.679	0.001 U	0.001 U	0.0003 J	0.0004 J	0.01 U	0.01 U	0.0026 J	0.0022 J	60.1 S	4.65	0.0011 J	0.002 U	0.0002 U	0.0002 U	0.0085 J	0.0054 J	0.116	0.0394	0.01 U	0.01 U	0.01 U	0.0079 J	0.0521	0.0151
HMW-40C[1]	10/10/2006	0.005 U	0.005 U	0.13	0.0236	0.784	0.675	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0054 J	0.01 U	0.01 U	35.6	7.26	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.0166	0.0038 J	0.01 U	0.01 U	0.0094 J	0.01 U	0.0124	0.01 U
HMW-40C	10/10/2006	0.005 U	0.005 U	0.362	0.0253	1.05	0.706	0.001 U	0.001 U	0.002 U	0.002 U	0.0071 J	0.0058 J	0.01 U	0.01 U	80.3	7.34	0.002	0.0013 J	0.0002 U	0.0002 U	0.0042 J	0.01 U	0.0421	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0335	0.01 U
HMW-40C[1]	4/13/2007	0.005 U	0.005 U	0.0829 S	0.0146	0.513	0.446	0.001 U	0.001 U	0.0004 J	0.0004 J	0.01 U	0.01 U	0.01 U	0.01 U	12.7	1.86	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0067 J	0.0048 J	0.0237 S	0.0091	0.01 U	0.01 U	0.01 U	0.01 U	0.0751	0.0661
HMW-40C	4/13/2007	0.005 U	0.005 U	0.0111	0.0134	0.512	0.442	0.001 U	0.001 U	0.0004 J	0.0005 J	0.01 U	0.01 U	0.01 U	0.01 U	12.5 S	1.66	0.0015 J	0.002 U	0.0002 U	0.0002 U	0.0071 J	0.0049 J	0.0351	0.0084	0.01 U	0.01 U	0.01 U	0.01 U	0.0796	0.0743
HMW-40C	7/11/2006	0.005 U	0.005 U	0.0917	0.0235	0.646	0.541	0.001 U	0.001 U	0.0018 J	0.0004 J	0.01 U	0.01 U	0.01 U	0.004 J	17	3.52	0.0004 J	0.002 U	0.0002 U	0.0002 U	0.0107	0.0061 J	0.0287	0.0184	0.01 U	0.01 U	0.01 U	0.01 U	0.0191	0.0072 J
HMW-40C	7/12/2007	0.005 U	0.005 U	0.171	0.002 J	0.447	0.345	0.001 U	0.001 U	0.0013 J	0.0014 J	0.01 U	0.01 U	0.0023 U	0.0034 U	25.1	0.337	0.0005 J	0.002 U	0.0002 U	0.0002 U	0.0105	0.0068 J	0.0372	0.006 U	0.01 U	0.01 U	0.0063 J	0.01 U	0.0422	0.0088 J
HMW-49B	1/15/2007	0.005 U	0.005 U	0.0187	0.0189	0.64	0.63	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.0072 J	0.0077 J	30.3	28.7	0.0027	0.0016 J	0.0002 U	0.0002 U	0.0057 J	0.0062 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0053 J	0.0048 J	0.0097 J	0.0034 J
HMW-49B	4/16/2007	0.005 U	0.005 U	0.0256	0.0254	0.74	0.694	0.001 U	0.001 U	0.001 J	0.0005 J	0.01 U	0.0045 J	0.0095 J	0.0061 J	29.5	26	0.0007 J	0.002 U	0.0002 U	0.0002 U	0.0082 J	0.0046 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0071 J	0.0026 J
HMW-49C	1/16/2007	0.005 U	0.005 U	0.0055	0.0027 J	0.38	0.315	0.0003 J	0.001 U	0.0014 J	0.0003 J	0.0237	0.01 U	0.011	0.0034 J	31.4	17.4	0.0226	0.0129	0.0002 U	0.0002 U	0.0233	0.0046 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0312	0.0087 J	0.496	0.0806
HMW-49C	10/11/2006	0.005 U	0.005 U	0.0067	0.005	0.342	0.317	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0058 J	0.01 U	0.01 U	19.4	17.3	0.0197	0.0162	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0035 J	0.01 U	0.0347	0.0029 J
HMW-49C	4/16/2007	0.005 U	0.005 U	0.0031	0.0045	0.332	0.278	0.001 U	0.001 U	0.0086	0.0005 J	0.0052 J	0.004 J	0.0054 J	0.0076 J	13	8.47	0.0035	0.0009 J	0.0002 U	0.0002 U	0.0126	0.0135	0.006 U	0.006 U	0.01 U	0.01 U	0.0067 J	0.01 U	0.897	1.02
HMW-49C	7/10/2006	0.005 U	0.005 U	0.0077	0.0047	0.371	0.318	0.001 U	0.001 U	0.0014 J	0.0005 J	0.0133	0.0057 J	0.0118	0.0056 J	28.8	18.6	0.0154	0.0129	0.0002 U	0.0002 U	0.0227	0.0144	0.006 U	0.006 U	0.0034 J	0.01 U	0.0054 J	0.01 U	0.152	0.006 J
HMW-49C	7/18/2007	0.005 U	0.005 U	0.0066	0.0066	0.767	0.414	0.0016	0.001 U	0.0122	0.0011 U	0.0806	0.01 U	0.0233	0.0027 J	54.6	5.59	0.038	0.0113	0.00006 J	0.0002 U	0.0773	0.0059 J	0.006 U	0.006 U	0.01 U	0.01 U	0.0915	0.0032 J	0.562	0.0201
HMW-49D	1/16/2007	0.005 U	0.005 U	0.0011 J	0.003 U	0.325	0.282	0.001 U	0.001 U	0.0008 J	0.0004 J	0.01 U	0.01 U	0.0034 J	0.01 U	32.4	28.1	0.0044	0.002 U	0.0002 U	0.0002 U	0.005 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0037 J	0.0059 J	0.0587	0.0032 J
HMW-49D[1]	10/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.323	0.304	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0066 J	0.01 U	0.01 U	29.2	27.7	0.0018 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0077 J	0.01 U	0.0294	0.01 U
HMW-49D	10/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.351	0.298	0.001 U	0.001 U	0.002 U	0.002 U	0.004 J	0.0067 J	0.01 U	0.01 U	30.4	27.8	0.0045	0.0009 J	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0077 J	0.01 U	0.0521	0.01 U
HMW-49D	4/16/2007	0.005 U	0.005 U	0.0008 J	0.0011 J	0.298	0.303	0.0003 J	0.001 U	0.0012 J	0.0005 J	0.0046 J	0.01 U	0.0083 J	0.0022 J	31.6	28	0.0008 J	0.002 U	0.0002 U	0.0002 U	0.0079 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0059 J	0.01 U	0.0332	0.01 U
HMW-49D[1]	7/10/2006	0.005 U	0.005 U	0.0029 J	0.003 U	0.368	0.29	0.001 U	0.001 U	0.0016 J	0.0012 J	0.0075 J	0.0052 J	0.0074 J	0.0053 J	31.2	26.8	0.0058	0.0005 J	0.0002 U	0.0002 U	0.0174	0.0147	0.006 U	0.006 U	0.0033 J	0.01 U	0.0057 J	0.01 U	0.0719	0.0022 J
HMW-49D	7/10/2006	0.005 U	0.005 U	0.0013 J	0.003 U	0.372	0.291	0.001 U	0.001 U	0.0014 J	0.0005 J	0.0055 J	0.01 U	0.0055 J	0.0044 J	30.7	27.1	0.0062	0.002 U	0.0002 U	0.0002 U	0.0174	0.0129	0.006 U	0.006 U	0.0038 J	0.0032 J	0.0047 J	0.01 U	0.0759	0.0026 J
HMW-49D[1]	7/16/2007	0.005 U	0.0021 U	0.003 U	0.003 U	0.256	0.273	0.001 U	0.001 U	0.001 U	0.0011 U	0.01 U	0.01 U	0.01 U	0.0025 J	25.6	24.5	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0135 U	0.01 U
HMW-49D	7/16/2007	0.0018 U	0.005 U	0.003 U	0.003 U	0.296	0.277	0.0003 J	0.001 U	0.0016 U	0.001 U	0.01 U	0.01 U	0.0047 J	0.0027 J	26	25	0.0007 J	0.002 U	0.0002 U	0.0002 U	0.0038 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0037 J	0.01 U	0.0206 U	0.01 U
HMW-50A	1/16/2007	0.005 U	0.005 U	0.0009 J	0.003 U	0.0484	0.0409	0.001 U	0.001 U	0.0013 J	0.0006 J	0.0288	0.0309	0.01 U	0.01 U	0.852	0.02 U	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0038 J	0.01 U	0.0054 J	0.0056 J	0.01 U	0.01 U	0.0056 J	0.0068 J	0.0059 J	0.0039 J
HMW-50A	10/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.058	0.0504	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0047 J	0.01 U	0.01 U	0.731	0.02 U	0.002 U	0.0012 J	0.0002 U	0.0002 U	0.0048 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
HMW-50A	4/13/2007	0.005 U	0.005 U	0.0026 J	0.0045 J	0.0588	0.0395	0.001 U	0.001 U	0.0005 J	0.002 U	0.0142	0.0117	0.0022 J	0.01 U	1.52	0.02 U	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.0063 J	0.01 U	0.006 U	0.0036 J	0.01 U	0.01 U	0.007 J	0.0033 J	0.0123	0.0023 J
HMW-50A	7/11/2006	0.005 U	0.005 U	0.003 U	0.001 J	0.0579	0.0436	0.001 U	0.001 U	0.0007 J

Table E-2
Four Quarters of Groundwater Analytical Results - Metals (Total and Dissolved)

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group / Hartford, Illinois

Well ID	Date	Constituent																													
		Antimony	Antimony (Dissolved)	Arsenic	Arsenic (Dissolved)	Barium	Barium (Dissolved)	Beryllium	Beryllium (Dissolved)	Cadmium	Cadmium (Dissolved)	Chromium	Chromium (Dissolved)	Cobalt	Cobalt (Dissolved)	Iron	Iron (Dissolved)	Lead	Lead (Dissolved)	Mercury	Mercury (Dissolved)	Nickel	Nickel (Dissolved)	Selenium	Selenium (Dissolved)	Silver	Silver (Dissolved)	Vanadium	Vanadium (Dissolved)	Zinc	Zinc (Dissolved)
TACO Comparison Value		0.006 mg/l	0.006 mg/l	0.05 mg/l	0.05 mg/l	2 mg/l	2 mg/l	0.004 mg/l	0.004 mg/l	0.005 mg/l	0.005 mg/l	0.1 mg/l	0.1 mg/l	1 mg/l	1 mg/l	5 mg/l	5 mg/l	0.0075 mg/l	0.0075 mg/l	0.002 mg/l	0.002 mg/l	0.1 mg/l	0.1 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.05 mg/l	0.049 mg/l	0.049 mg/l	5 mg/l	5 mg/l
HMW-50A	7/13/2007	0.003 U	0.0027 J	0.0015 J	0.0007 J	0.0538	0.0356	0.001 U	0.001 U	0.0005 J	0.0004 J	0.0048 J	0.01 U	0.0024 J	0.01 U	1.2	0.02 U	0.0004 J	0.002 U	0.0002 U	0.0002 U	0.0042 J	0.01 U	0.006 J	0.006 U	0.01 U	0.01 U	0.0048 J	0.0042 J	0.0104 U	0.0256
HMW-50B[1]	1/15/2007	0.005 U	0.0028 J	0.001 J	0.003 U	0.352	0.311	0.001 U	0.001 U	0.0006 J	0.002 U	0.0071 J	0.01 U	0.01 U	0.01 U	9.4 S	4.02	0.0042	0.002 U	0.0002 U	0.0002 U	0.0045 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0075 J	0.0039 J	0.0364	0.004 J
HMW-50B	1/15/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.351	0.312	0.001 U	0.001 U	0.0003 J	0.002 U	0.0042 J	0.01 U	0.01 U	0.01 U	9.26	4	0.0017 J	0.002 U	0.0002 U	0.0002 U	0.0045 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.008 J	0.01 U	0.018	0.0063 J
HMW-50B	10/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.215	0.193	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.005 J	0.01 U	0.01 U	4.74	3.02	0.002 U	0.0011 J	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 US	0.006 U	0.01 U	0.01 U	0.01 U	0.0086 J	0.01 U	0.01 U
HMW-50B	4/13/2007	0.005 U	0.005 U	0.0013 J	0.0023 J	0.335	0.308	0.001 U	0.001 U	0.002 U	0.002 U	0.0042 J	0.01 U	0.01 U	0.01 U	8.11 S	6.58	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0032 J	0.01 U	0.0041 J	0.0032 J
HMW-50B	7/11/2006	0.005 U	0.005 U	0.003 U	0.0008 J	0.289	0.273	0.001 U	0.001 U	0.0013 J	0.002 U	0.0042 J	0.01 U	0.0036 J	0.0037 J	5.67	5.22	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.0038 J	0.0033 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0071 J	0.0058 J
HMW-50B	7/18/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.282	0.298	0.001 U	0.001 U	0.0007 J	0.0011 U	0.005 J	0.01 U	0.0038 J	0.0022 J	5.66	6.02	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0034 J	0.01 U	0.006 UJ	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0061 U	0.0098 J
HMW-50C	1/16/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.255	0.246	0.001 U	0.001 U	0.0005 J	0.0004 J	0.0042 J	0.01 U	0.0026 J	0.01 U	4.14	1.18	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.0078 J	0.0042 J	0.0027 J
HMW-50C	10/9/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.256	0.247	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0057 J	0.01 U	0.01 U	2.63	0.184	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0093 J	0.01 U
HMW-50C[1]	4/16/2007	0.005 U	0.005 U	0.003 U	0.0011 J	0.268	0.248	0.001 U	0.001 U	0.0005 J	0.0018 J	0.01 U	0.0046 J	0.01 U	0.0034 J	12.4	8.64	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0038 J
HMW-50C	4/16/2007	0.005 U	0.005 U	0.003 U	0.0018 J	0.262	0.292	0.001 U	0.001 U	0.0005 J	0.0003 J	0.01 U	0.0044 J	0.01 U	0.0022 J	13	8.81	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0054 J	0.01 U
HMW-50C	7/10/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.29	0.257	0.001 U	0.001 U	0.0015 J	0.0011 J	0.0074 J	0.0067 J	0.0056 J	0.0064 J	14.4	0.756	0.0009 J	0.002 U	0.0002 U	0.0002 U	0.0081 J	0.0061 J	0.006 U	0.006 US	0.0059 J	0.01 U	0.01 U	0.01 U	0.009 J	0.003 J
HMW-50C[1]	7/16/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.236	0.259	0.001 U	0.001 U	0.0008 U	0.0016 U	0.01 U	0.01 U	0.01 U	0.0024 J	5.45	3.06	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0168 U	0.0059 U
HMW-50C	7/16/2007	0.005 U	0.0017 U	0.003 U	0.003 U	0.25	0.258	0.001 U	0.001 U	0.002 U	0.0003 J	0.01 U	0.01 U	0.0033 J	0.01 U	5.69	3.1	0.002 U	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 R	0.01 U	0.01 U	0.01 U	0.01 U	0.0146 U	0.0026 U
HMW-52C	1/17/2007	0.005 U	0.005 U	0.0067	0.0022 J	0.507	0.397	0.0003 J	0.001 U	0.002	0.002 U	0.0159	0.01 U	0.0073 J	0.01 U	34 S	17.8 S	0.0268	0.002 U	0.0002 U	0.0002 U	0.0177	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0293	0.01 U	0.374	0.004 J
HMW-52C	10/10/2006	0.005 U	0.005 U	0.0021 J	0.0015 J	0.384	0.358	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0063 J	0.0023 J	0.01 U	16.1	14.3	0.0068	0.0029	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0062 J	0.01 U	0.0661	0.0303
HMW-52C	4/13/2007	0.005 U	0.005 U	0.005	0.0026 J	0.462	0.31	0.0004 J	0.001 U	0.0022	0.002 U	0.0197	0.01 U	0.0085 J	0.01 U	30.6	16.1	0.0221	0.002 U	0.0002 U	0.0002 U	0.0213	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0305	0.01 U	0.387	0.0025 J
HMW-52C	7/10/2006	0.005 U	0.005 U	0.008	0.0026 J	0.495	0.358	0.0004 J	0.001 U	0.0016 J	0.001 J	0.0187	0.0052 J	0.0083 J	0.0039 J	29.6	14.4	0.0143	0.002 U	0.0002 U	0.0002 U	0.0425	0.0197	0.006 U	0.006 U	0.0057 J	0.0038 J	0.0242	0.01 U	0.464	0.0099 J
HMW-52C	7/13/2007	0.0021 U	0.0019 J	0.0044	0.0015 J	0.426	0.312	0.0003 J	0.001 U	0.002	0.0011 J	0.0088 J	0.01 U	0.0076 J	0.01 U	22.6 S	12.4	0.0098	0.002 U	0.0002 U	0.0002 U	0.0129	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0195	0.01 U	0.183 U	0.01 U
MP-81C	1/16/2007	0.005 U	0.005 U	0.003 U	0.003 U	0.0663	0.0646	0.001 U	0.001 U	0.0006 J	0.0005 J	0.01 U	0.01 U	0.0088 J	0.0092 J	0.205	0.012 J	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0232	0.0222	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0081 J	0.0068 J
MP-81C	10/11/2006	0.005 U	0.005 U	0.0013 J	0.003 U	0.0697	0.0649	0.001 U	0.001 U	0.0004 J	0.002 U	0.01 U	0.0054 J	0.0075 J	0.0087 J	0.0313	0.805	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0199	0.0213	0.006 U	0.006 U	0.01 U	0.01 U	0.0089 J	0.01 U	0.0036 J	0.0044 J
MP-81C	4/16/2007	0.005 U	0.005 U	0.0021 J	0.003 U	0.0918	0.0698	0.001 U	0.001 U	0.0006 J	0.0003 J	0.0044 J	0.01 U	0.0108	0.0091 J	1.35	0.0212	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.0267	0.0246	0.006 U	0.006 U	0.01 U	0.01 U	0.0053 J	0.01 U	0.0123	0.0073 J
MP-81C	7/11/2006	0.005 U	0.005 U	0.003 U	0.003 U	0.0729	0.068	0.001 U	0.001 U	0.0007 J	0.002 U	0.01 U	0.01 U	0.0089 J	0.008 J	0.0498	0.02 U	0.0006 J	0.002 U	0.0002 U	0.0002 U	0.0242	0.0243	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0095 J	0.0095 J
MP-81C	7/12/2007	0.0025 U	0.005 U	0.003 U	0.003 U	0.0646	0.0592	0.001 U	0.001 U	0.0003 J	0.0008 J	0.01 U	0.01 U	0.0022 U	0.0022 U	0.0426	0.02 U	0.002 U	0.0006 J	0.0002 U	0.0002 U	0.0147	0.0157	0.0407	0.0276	0.01 U	0.01 U	0.01 U	0.01 U	0.0159	0.0076 J
MP-89A	4/13/2007																														
MP-89A	7/18/2007	0.005 U		0.003 U		0.0519		0.001 U		0.002 U		0.01 U		0.01 U		0.222		0.002 U		0.0002 U		0.0034 J		0.006 U		0.01 U		0.01 U		0.127	
MP-89A	7/23/2007		0.005 U		0.0007 J		0.0661		0.001 U		0.0006 U		0.01 U		0.0044 U		0.02 U		0.0004 J		0.0002 U		0.01 U		0.006 U		0.01 U		0.0047 J		0.129
MP-89C	1/16/2007	0.005 U	0.005 U	0.0053	0.0026 J	0.29	0.148	0.001 U	0.001 U	0.0005 J	0.0003 J	0.0044 J	0.01 U	0.0049 J	0.0033 J	41.9	28.4	0.0039	0.002 U	0.0002 U	0.0002 U	0.0116	0.006 J	0.0132	0.006 U	0.01 U	0.01 U	0.0097 J	0.01 U	0.0182	0.0034 J
MP-89C	10/11/2006	0.005 U	0.005 U	0.015	0.0141	0.198	0.159	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.0065 J	0.01 U	0.01 U	30.3	28.8	0.0007 J	0.002 U	0.0002 U	0.0002 U	0.01 U	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.008 J	0.01 U	0.0193	0.01 U
MP-89C	4/16/2007	0.005 U	0.005 U	0.0974	0.0561	0.35	0.159	0.001 U	0.001 U	0.0015 J	0.0005 J	0.0075 J	0.01 U	0.0074 J	0.0033 J	45.1	27.6	0.0058	0.002 U	0.0002 U	0.0002 U	0.0167	0.0072 J	0.0099	0.006 U	0.01 U	0.01 U	0.0155	0.01 U	0.035	0.0173
MP-89C	7/11/2006	0.005 U	0.005 U	0.0009 J	0.0014 J	0.313	0.252	0.001 U	0.001 U	0.0021	0.0007 J	0.01 U	0.01 U	0.0144	0.0147	29	20.8	0.0015 J	0.0009 J	0.0002 U	0.0002 U	0.0339	0.034	0.087	0.0803	0.01 U	0.01 U	0.01 U	0.01 U	0.0129	0.0086 J
MP-89C	7/13/2007	0.0035 U	0.003 J	0.005	0.0022 J	0.166	0.0586	0.0003 J	0.001 U	0.0025	0.0012 J	0.0053 J	0.01 U	0.0303	0.0219	23	12.6	0.0025	0.002 U	0.0002 U	0.0002 U	0.0623	0.0471	0.273	0.26	0.01 U	0.01 U	0.0136	0.01 U	0.0436 U	0.0107
MP-92D	1/16/2007	0.005 U	0.0021 J	0.0026 J	0.0023 J	0.184	0.165	0.001 U	0.001 U	0.0005 J	0.0004 J	0.0051 J	0.004 J	0.0036 J	0.0029 J	8.2	7.05 S	0.0012 J	0.002 U	0.0002 U	0.0002 U	0.0057 J	0.0038 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0138	0.0033 J
MP-92D	10/11/2006	0.005 U	0.005 U	0.005	0.0031	0.173	0.126	0.001 U	0.001 U	0.002 U	0.002 U	0.01 U	0.01 U	0.01 U	0.01 U	9.78	6.8	0.0031	0.002 U	0.0002 U	0.0002 U	0.0033 J	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0084 J	0.01 U
MP-92D	4/16/2007	0.005 U	0.005 U	0.0015 J	0.0039	0.206	0.173	0.001 U	0.001 U	0.0008 J	0.0005 J	0.0082 J	0.0041 J	0.0055 J	0.0033 J	11.2 S	6.29	0.0037	0.002 U	0.0002 U	0.0002 U	0.0108	0.01 U	0.006 U	0.006 U	0.01 U	0.01 U	0.0136	0.01 U	0.0244	0.0037 J
MP-92D[1]	7/11/2006	0.005 U	0.005 U	0.0028 J	0.003	0.164	0.145	0.001 U	0.001 U	0.0006 J	0.0003 J	0.01 U	0.01 U	0.0054 J	0.0068 J	6.35	5.55 S	0.0009 J	0.002 U	0.0002 U	0.0002 U	0.0081 J	0.0062 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0079 J	0.0038 J
MP-92D	7/11/2006	0.005 U	0.005 U	0.0048	0.0048	0.171	0.144	0.001 U	0.001 U	0.0011 J	0.0006 J	0.0044 J	0.01 U	0.0043 J	0.0052 J	6.68	5.53	0.0008 J	0.002 U	0.0002 U	0.0002 U	0.0096 J	0.0061 J	0.006 U	0.006 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0155	0.0028 J
MP-92D	7/12/2007	0.005 U	0.005 U	0.0063	0.0056	0.154	0.164	0.001 U	0.001 U	0.0011 J	0.0009 J	0.01 U	0.01 U	0.0046 U	0.0053 U	9.23	9.07 S	0.002 U	0.002 U	0.0002 U	0.0002 U	0.0048 J	0.0049 J	0.006 U	0.006 U	0.01 U	0.003 J	0.01 U	0.01 U	0.005 J	0.0036 J

Notes

[1] = Denotes Duplicate Sample
U= Not Detected (value preceding "U" denotes detection limit)
J= Estimated value.
R= RPD outside accepted recovery limits
S= Spike Recovery outside accepted recovery limits
H= Holding time exceeded
All units are in mg/L-milligrams per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

E-3

General Chemistry and Natural Attenuation Parameters

Table E-3
Four Quarters of Groundwater Analytical Results - General Chemistry and Natural Attenuation Parameters

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group/ Hartford, Illinois

Well ID	Date	Constituent															
		Alkalinity (as CaCO3)	Ammonia (as N)	Chemical Oxygen Demand	Chloride	Cyanide	Hardness (as CaCO3)	Nitrate	Nitrate plus Nitrite (as N)	Nitrite (as N)	Phosphorus	Phosphorus (Dissolved)	Sulfate	Sulfide	Total Dissolved Solids (TDS)	Total Organic Carbon	Total Suspended Solids
TACO Comparison Value		(mg/l)	(mg/l)	(mg/l)	200 mg/l	0.2 mg/l	(mg/l)	10 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)	400 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)
HMW-25[1]	1/15/2007	472	0.1 U	10 J	77	0.007 U	500	0.138	0.143	0.01 U	0.022	0.013 J	62	0.05 U	690	0.7 J	6 U
HMW-25	1/15/2007	476	0.1 U	12 J	78	0.007 U	510	0.171	0.176	0.01 U	0.02 U	0.02 U	66	0.05 U	680	0.7 J	6 U
HMW-25	10/11/2006	452	0.1 U	20 U	85	0.007 U	500	0.298	0.303	0.01 U	0.019 J	0.02 U	50	0.05 U	608	1.9	6 U
HMW-25[1]	4/13/2007	436	0.1 U	20 U	66	0.007 U	400	0.027 J	0.027 J	0.05 U	0.018 U	0.018 U	42	0.08	620	0.9 J	6 U
HMW-25	4/13/2007	432	0.1 U	20 U	67	0.007 U	460	0.05 U	0.05 U	0.05 U	0.018 U	0.018 U	40	0.04 J	618	0.7 J	6 U
HMW-25	7/10/2006	472	0.1 US	9 J	98	0.007 U	530	0.118	0.118	0.01 U	0.02 U	0.02 U	50	0.05 U	684	1.9	6 U
HMW-25	7/13/2007	504	0.1 U	11 J	63	0.007 UJ	460	0.049 U	0.049 U	0.01 U	0.11	0.045	40 U	0.18 J	652	5.6	6 U
HMW-26	1/15/2007	602	0.15	30	108 S	0.007 U	790	0.05 U	0.05 U	0.01 U	0.383	0.356	182	0.05 U	1090	1.6	39
HMW-26[1]	10/11/2006	600	0.27 S	20 U	125	0.007 U	760	0.05 U	0.05 U	0.01 U	0.392	0.381	205	0.02 J	1060	3	36
HMW-26	10/11/2006	598	0.28	20 U	120	0.007 U	780	0.05 U	0.05 U	0.01 U	0.384	0.347	207	0.05 J	1030	3.1	46
HMW-26	4/13/2007	598	0.29	17 J	201	0.007 U	1070	0.05 U	0.05 U	0.025 J	0.252	0.247	550	0.02 J	1580	1.4	37
HMW-26	7/10/2006	586			84	0.007 U	740			0.01 U		0.345	148	0.05 U	954	2.8	38
HMW-26	7/11/2006		0.21	24				0.012 J	0.012 J		0.367						
HMW-26	7/13/2007	612	0.3 U	20 U	115	0.007 U	990	0.017 J	0.017 U	0.01 U	0.326	0.285	381	0.05 J	1420	2	61
HMW-27	1/15/2007	614	0.1 U	30	24	0.007 U	840	0.052	0.055	0.01 U	0.042	0.025	139	0.05 U	856	2.7	6 U
HMW-27	10/12/2006	592	0.1 U	20 U	44	0.007 U	870	0.012 J	0.019 J	0.01 U	0.02 UB	0.02 U	239	0.05 U	1090	3.8	6 U
HMW-27	4/13/2007	628	0.1 U	20 U	18	0.007 U	720	0.05 U	0.05 U	0.05 U	0.162	0.018 U	109	0.04 J	800	2.7	7
HMW-27	7/10/2006	614	0.1 U	48	48	0.007 U	870	0.069	0.069	0.01 U	0.036	0.02 U	282	0.05 U	1070	4.4	6 U
HMW-27	7/13/2007	620	0.1 U	20 U	5	0.007 U	690	0.195	0.195	0.01 U	0.027	0.022	116	0.05 U	790	3.2	6 U
HMW-28	1/15/2007	534	0.1 US	21	30	0.007 U	610	2.18	2.25	0.089	0.035	0.012 J	79	0.05 U	698	3.3	6 U
HMW-28	10/12/2006	550	0.13	20 U	29	0.007 U	630	1.43	1.52	0.093	0.02 U	0.022 U	71	0.05 U	718	4	6 U
HMW-28	4/13/2007	520	0.1 U	12 J	27 S	0.007 U	680	0.797	0.861 S	0.064 S	0.029	0.018 U	101	0.08	720	2.6	6 U
HMW-28[1]	7/10/2006	544	0.1 U	19 J	24	0.007 U	600	1.32	1.42	0.101	0.02 U	0.02 U	64	0.05 U	706	4.1	6 U
HMW-28	7/10/2006	558	0.1 U	14 J	24	0.007 U	660	1.24	1.32	0.083	0.02 U	0.013 J	69	0.05 U	696	4.1	6 U
HMW-28	7/16/2007	524	0.1 U	24	17	0.007 U	600	1.27	1.28	0.02	0.074 U	0.023 U	138	0.01 J	738	5.5 U	6 U
HMW-29	1/16/2007	478	0.1 U	20 U	13	0.007 U	530	0.05 U	0.05 U	0.01 U	0.074	0.072	84	0.05 U	608	1.1	14
HMW-29	10/12/2006	460	0.08 J	20 U	17	0.007 U	620	0.051 S	0.056 S	0.01 U	0.116	0.089	65	0.05 U	616	1.6	20
HMW-29	4/16/2007	472	0.1 J	20 U	15	0.007 US	560	0.05 U	0.014 J	0.02 J	0.145	0.078	159	0.05 US	746	10.7 S	29
HMW-29	7/10/2006	500	0.09 J	12 J	5	0.007 U	460	0.05 U	0.05 U	0.01 U	0.173	0.061	47	0.05 U	588	1.6	48
HMW-29	7/16/2007	506	0.04 U	14 J	31	0.007 U	590	0.033 J	0.033 U	0.01 U	0.097 U	0.074 U	128	0.02 J	698	2.3 U	13
HMW-39B	1/15/2007	362	0.1 U	16 J	153	0.007 U	330	0.732	0.732	0.01 U	0.05	0.02 U	54	0.05 U	632	0.9 J	6 U
HMW-39B	10/10/2006	255	0.1 U	10 J	201	0.007 U	230	0.055	0.055	0.01 U	0.134	0.019 J	40 U	0.09 S	574	2.2	301
HMW-39B	4/13/2007	300	0.1 U	28	296	0.007 U	310	0.693	0.693 S	0.05 US	0.018 U	0.018 U	26	0.05 J	724	1 U	6 U
HMW-39B	7/10/2006	263	0.16	74	249	0.007 U	310	0.101	0.101	0.01 U	1.78	0.011 J	40 U	0.47 S	628	2.1	3280
HMW-39B	7/23/2007					0.007 U						0.053					
HMW-39C[1]	1/15/2007	252	0.14	23	219	0.007 U	290	0.05 U	0.011 J	0.01 U	0.317	0.235	46	0.05 U	612	0.5 J	8
HMW-39C	1/15/2007	255	0.12	23	220	0.007 U	330	0.013 J	0.016 J	0.01 U	0.337	0.235	48	0.05 U	606	0.6 J	9
HMW-39C	10/11/2006	258	0.28	20 U	205	0.007 U	280	0.05 U	0.05 U	0.01 U	0.352	0.312	40 U	0.02 J	614	1.7	18
HMW-39C	4/16/2007	245	0.33	20 U	133	0.007 U	210	0.019 J	0.019 J	0.05 U	0.404	0.31	14	0.05 U	468	2.2	23
HMW-39C	7/11/2006	258	0.27	19 J	173	0.007 U	290	0.036 J	0.036 J	0.01 U	0.332	0.286	40 U	0.05 U	590	1.9	6
HMW-39C	7/20/2007	228	0.31	17 J	221	0.007 U	350	0.101	0.101	0.01 U	0.359	0.292	40 U	0.05 U	640	1.6 U	13
HMW-40C	1/16/2007	424	0.1 U	16 J	18	0.007 U	480	0.098	0.129	0.04	0.446	0.02 U	50	0.46 S	490	3.5	156

Table E-3
Four Quarters of Groundwater Analytical Results - General Chemistry and Natural Attenuation Parameters

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group/ Hartford, Illinois

Well ID	Date	Constituent															
		Alkalinity (as CaCO3)	Ammonia (as N)	Chemical Oxygen Demand	Chloride	Cyanide	Hardness (as CaCO3)	Nitrate	Nitrate plus Nitrite (as N)	Nitrite (as N)	Phosphorus	Phosphorus (Dissolved)	Sulfate	Sulfide	Total Dissolved Solids (TDS)	Total Organic Carbon	Total Suspended Solids
TACO Comparison Value		(mg/l)	(mg/l)	(mg/l)	200 mg/l	0.2 mg/l	(mg/l)	10 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)	400 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)
HMW-40C[1]	10/10/2006	424	0.09 J	8 J	24	0.007 U	460	0.015 J	0.02 J	0.01 U	0.18	0.015 J	40 U	0.05 U	504	3.1	82
HMW-40C	10/10/2006	408	0.17	10 J	25	0.007 U	430	0.022 J	0.027 J	0.01 U	0.522	0.011 J	40 U	0.05 J	510	4.6	199
HMW-40C[1]	4/13/2007	390	0.1 U	12 J	14	0.007 U	360	0.974	0.991	0.017 J	0.035	0.018 U	313	0.02 J	446	2.2	28
HMW-40C	4/13/2007	386	0.1 U	17 J	15	0.007 U	370	0.818 H	0.836 H	0.018 J	0.045	0.018 U	265	0.02 J	454	1.9	27
HMW-40C	7/11/2006	400	0.1 U	9 J	18	0.007 U	430	0.156	0.195	0.039	0.085	0.02 U	40 U	0.05 U	454	2.7	39
HMW-40C	7/12/2007	326	0.1 U	19 J	23	0.007 U	370	1.81	1.86	0.05	0.208	0.034 U	40 U	0.19	386	2.5	71
HMW-49B	1/15/2007	746	0.1 U	64	457 S	0.007 U	1080	0.05 U	0.05 U	0.01 U	0.659	0.624	47 S	0.4	1500	1.3	24
HMW-49B	4/16/2007	846	0.09 J	68	409	0.007 U	1130	0.05 U	0.02 J	0.042 J	1.17 S	1.12	72	0.22	1730	2.8	59
HMW-49C	1/16/2007	504	0.07 J	145	8	0.007 U	440	0.028 J	0.032 J	0.01 U	0.443	0.258	40 U	0.87 S	528	8.9	180
HMW-49C	10/11/2006	506	0.1 U	72	8	0.007 U	470	0.01 J	0.01 J	0.01 U	0.552	0.366	40 U	0.11 S	526	9.4	77
HMW-49C	4/16/2007	510	0.4	94	32	0.007 U	430	0.022 J	0.022 J	0.05 U	0.34	0.172	8	0.12	564	17.5	199
HMW-49C	7/10/2006	482	0.06 J	55	14	0.007 U	470	0.05 U	0.05 U	0.01 U	0.918	0.837	40 U	0.04 J	524	7.6 S	55
HMW-49C	7/18/2007	516	0.08 U	124	18	0.007 U	510	0.014 J	0.014 U	0.01 U	0.45	0.065 U	40 U	0.22 J	588	19	620
HMW-49D	1/16/2007	534	0.15	26	45	0.007 U	560	0.05 U	0.05 U	0.01 U	0.502	0.62	55	0.08	610	4.2	114
HMW-49D[1]	10/10/2006	412	0.21	20	50	0.007 U	520	0.336	0.336	0.01 U	0.726	0.381	40 U	0.05 J	628	4.4	57
HMW-49D	10/10/2006	530	0.2	18 J	47	0.007 U	500	0.079	0.079	0.01 U	0.551	0.432	40 U	0.05	624	4.4	64
HMW-49D	4/16/2007	564	0.2	19 J	43	0.007 U	500	0.017 J	0.04 J	0.023 J	0.612	0.51	7	0.02 J	632	5	56
HMW-49D[1]	7/10/2006	520	0.19	45	37	0.007 U	540	0.323	0.363	0.04	0.685	0.628	40 U	0.03 J	600	5	116
HMW-49D	7/10/2006	528	0.18	41	37	0.007 U	500	0.027 J	0.06	0.033	0.672	0.663	40 U	0.04 J	594	5	103
HMW-49D[1]	7/16/2007	492	0.17 U	34	42	0.007 U	450	0.035 J	0.046 U	0.01	0.623	0.623	40 U	0.06	546	4.6 U	69
HMW-49D	7/16/2007	498	0.18 U	38	40	0.007 U	430	0.04 J	0.04 U	0.01 U	0.611	0.637	40 U	0.04 J	556	4.8 U	70
HMW-50A	1/16/2007	408	0.1 U	20 U	15	0.007 U	630	3.53	3.54	0.01 U	0.205	0.169	279	0.04 J	862	2.6	23
HMW-50A	10/10/2006	498	0.1 U	20 U	26	0.007 U	920	0.75	0.773	0.023	0.233	0.118	513	0.03 J	1260	2.6	13
HMW-50A	4/13/2007	430	0.1 U	24	13	0.007 U	590	2.92 H	2.92 H	0.05 UH	0.233	0.181	327	0.08	858	2.5	25
HMW-50A	7/11/2006	500	0.1 U	9 J	23	0.007 U	940	0.871	0.871	0.01 U	0.277	0.219	475	0.05 U	1240	2.5	57
HMW-50A	7/13/2007	462	0.1 U	20 U	19	0.007 U	740	2.34	2.34	0.01 U	0.266	0.247	336	0.07 J	1000	2.2	26
HMW-50B[1]	1/15/2007	285	1.57	97	385	0.007 U	840	0.238	0.241	0.01 U	0.388	0.081	375	0.12 S	1500	1 US	104
HMW-50B	1/15/2007	293	1.53	55	408	0.007 U	1010	0.922	0.922	0.01 U	0.305	0.077	392	0.03 J	1550	1 U	88
HMW-50B	10/10/2006	220	1.92	35	287	0.007 U	710	0.01 J	0.01 J	0.01 U	0.529	0.347	360	0.08	1280	1.9	35
HMW-50B	4/13/2007	290	1.9	52	399	0.007 U	1100	0.658	0.67	0.012 J	0.565	0.471	339	0.01 J	1540	0.5 J	43
HMW-50B	7/11/2006	271	1.83	26	432	0.007 U	920	0.013 J	0.013 J	0.01 U	0.483	0.285	398	0.05 U	1650	1.8	65
HMW-50B	7/18/2007	294	1.65	20 J	394	0.007 U	920	0.026 J	0.026 U	0.01 U	0.454	0.4	361	0.04 J	1410	2.2 U	23
HMW-50C	1/16/2007	568	0.48	51	439	0.007 U	770	0.05 U	0.05 U	0.01 U	0.438	0.748	89	4.9	1290	1 J	13
HMW-50C	10/9/2006	592	0.41	62	639 S	0.007 U	1090	0.012 J	0.012 J	0.01 U	0.845	0.868	64	20	1840	2 S	10
HMW-50C[1]	4/16/2007	510	0.78	31	406 S	0.007 U	770	0.019 J	0.019 J	0.05 US	0.702	0.623	126	0.9	1410	2.6	32
HMW-50C	4/16/2007	506	0.8	45	423	0.007 U	830	0.019 J	0.019 J	0.05 U	0.708	0.697	134	0.44	1470	2.1	33
HMW-50C	7/10/2006	560	0.42	55	480	0.007 U	910	0.013 J	0.013 J	0.01 U	0.804	0.762	66	8.2	1700	2.3	29
HMW-50C[1]	7/16/2007	542	0.55 U	56	300	0.007 U	760	0.036 J	0.036 U	0.01 U	0.724	0.707	40 U	7.4	1210	2.3 U	21
HMW-50C	7/16/2007	540	0.56 U	56	375	0.007 U	780	0.048 J	0.048 U	0.01 U	0.749	0.727	40 U	8.5	1160	2.2 U	21
HMW-52C	1/17/2007	610	0.13	23	40 S	0.375	830	0.01 J	0.01 J	0.01 U	0.429	0.148	127	0.51 S	866	1.8	632
HMW-52C	10/10/2006	464	0.19	20 U	36	0.389	680	0.013 J	0.013 J	0.01 U	0.326	0.174	144	0.08 S	874	2.3	152

Table E-3
Four Quarters of Groundwater Analytical Results - General Chemistry and Natural Attenuation Parameters

1190505040 -- Madison County -- ILR 000128249
The Hartford Working Group/ Hartford, Illinois

Well ID	Date	Constituent														
		Alkalinity (as CaCO3)	Ammonia (as N)	Chemical Oxygen Demand	Chloride	Cyanide	Hardness (as CaCO3)	Nitrate	Nitrate plus Nitrite (as N)	Nitrite (as N)	Phosphorus	Phosphorus (Dissolved)	Sulfate	Sulfide	Total Dissolved Solids (TDS)	Total Organic Carbon	Total Suspended Solids
TACO Comparison Value		(mg/l)	(mg/l)	(mg/l)	200 mg/l	0.2 mg/l	(mg/l)	10 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)	400 mg/l	(mg/l)	(mg/l)	(mg/l)	(mg/l)
HMW-52C	4/13/2007	626	0.26	73	72	0.109	720	0.022 J	0.05	0.028 J	0.878	0.18	77	0.41 S	922	1.9	1100
HMW-52C	7/10/2006	586	0.18	50	34	0.404	740	0.062	0.062	0.01 U	0.614	0.195	136	0.25 S	850	2.7	626
HMW-52C	7/13/2007	614	0.16 U	24	56 J	0.304	770	0.013 J	0.013 U	0.01 U	0.532	0.201	124	0.21 J	942	1.8	651
MP-81C	1/16/2007	584	0.16	20 U	30	0.007 U	700	0.05 U	0.05 U	0.01 U	0.02 U	0.02 U	142	0.05 U	854	1.7	6 U
MP-81C	10/11/2006	600	0.18	20 U	34	0.007 U	750	0.012 J	0.017 J	0.01 U	0.021	0.02 U	188 S	0.05 U	838	1.8	6 U
MP-81C	4/16/2007	596	0.22	20 U	33	0.007 U	640	0.05	0.05	0.05 U	0.035	0.031	143	0.02 J	858	3.5	21
MP-81C	7/11/2006	584	0.08 J	20 U	55	0.007 U	770	0.358	0.358	0.01 U	0.011 J	0.02 U	163	0.05 U	918	1.7	6 U
MP-81C	7/12/2007	588	0.1 U	20 U	29	0.007 U	680 S	11.2	11.2	0.01 U	0.067	0.019	142	0.05 U	922	2.8	6 U
MP-89C	1/16/2007	368	0.17	48	27	0.007 U	810	0.05 U	0.05 U	0.01 U	0.715	0.267	591	0.26 S	1160	8.2	208
MP-89C	10/11/2006	376	0.22	20 U	31	0.007 U	740	0.036 J	0.036 J	0.01 U	0.509	0.331	449	0.04 J	1030	2.9	75
MP-89C	4/16/2007	514	0.24	52	55	0.007 U	900	0.096	0.141	0.045 J	1.57	0.232	354	0.2 S	1090	4.5	326
MP-89C	7/11/2006	319	0.18	29	24	0.007 U	820	0.199	0.312	0.113	0.809	0.298	553	0.08 S	1120	3.4	93
MP-89C	7/13/2007	398	0.11	16 J	23	0.007 U	1250	1.29	1.29	0.03	0.597	0.055	856	0.16 J	1660	2.6	161
MP-92D	1/16/2007	604	0.1 U	10 J	70	0.007 U	720	0.05 U	0.05 U	0.01	0.091	0.028	120	0.1 S	898	1.1	44
MP-92D	10/11/2006	622	0.06 J	8 J	66	0.007 U	790	0.01 J	0.015 J	0.01 U	0.061	0.016 J	228	0.05 S	1040	2.4	6 U
MP-92D	4/16/2007	628	0.1 U	45	59	0.007 U	660	0.02 J	0.02 J	0.05 U	0.657	0.061	111	0.21 S	854	2.5	281
MP-92D[1]	7/11/2006	628	0.04 J	17 J	69	0.007 U	860	0.05 U	0.05 U	0.01 U	0.069	0.019 J	240	0.05 U	1070	2.9	27
MP-92D	7/11/2006	630	0.06 J	21	70	0.007 U	860	0.05 U	0.05 U	0.01 U	0.061	0.019 J	246	0.03 J	1070	3.1	46
MP-92D	7/12/2007	628	0.05 U	9 J	57	0.007 U	780	0.099	0.99 U	0.01 U	0.078	0.063	96	0.03 J	840	2.6	26

Notes

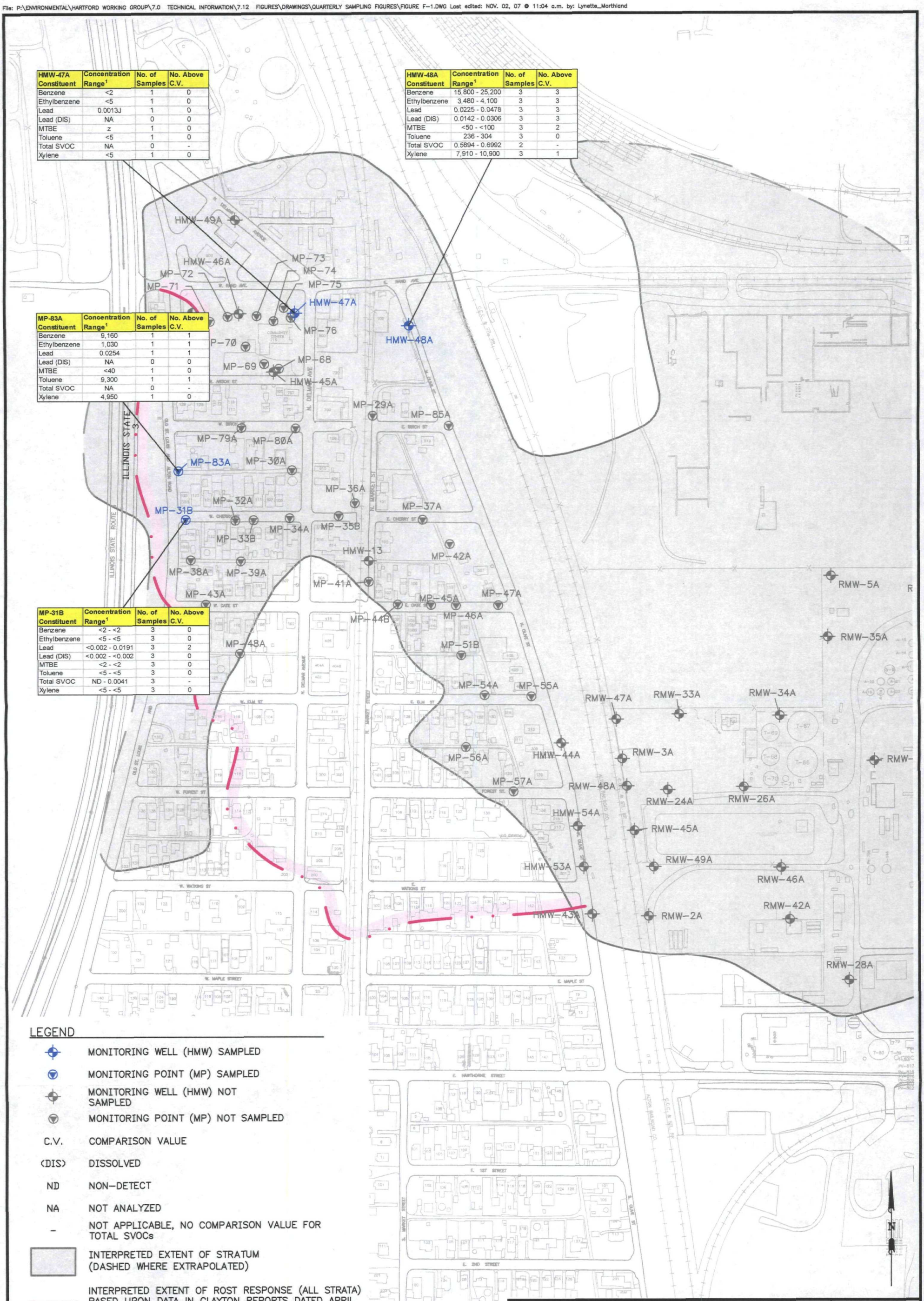
[1] = Denotes Duplicate Sample
U= Not Detected (value preceding "U" denotes detection limit)
J= Estimated value.
R= RPD outside accepted recovery limits
S= Spike Recovery outside accepted recovery limits
H= Holding time exceeded
All units are in mg/L-milligrams per liter

Comparison values are Tier 1 Class 1 Groundwater Remediation Objectives from Illinois EPA's Tiered Approach to Corrective Action Objectives, last amended February 15, 2007. Comparison values used for comparison purposes only.

APPENDIX F

HISTORICAL SUMMARY FIGURES OF GROUNDWATER ANALYTICAL RESULTS-DECEMBER 2003 THROUGH July 2007

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE F-1.DWG Last edited: NOV. 02, 07 @ 11:04 a.m. by: Lynette_Morthland



HMW-47A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2	1	0
Ethylbenzene	<5	1	0
Lead	0.0013J	1	0
Lead (DIS)	NA	0	0
MTBE	z	1	0
Toluene	<5	1	0
Total SVOC	NA	0	-
Xylene	<5	1	0

HMW-48A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	15,800 - 25,200	3	3
Ethylbenzene	3,480 - 4,100	3	3
Lead	0.0225 - 0.0478	3	3
Lead (DIS)	0.0142 - 0.0306	3	3
MTBE	<50 - <100	3	2
Toluene	236 - 304	3	0
Total SVOC	0.5894 - 0.6992	2	-
Xylene	7,910 - 10,900	3	1

MP-83A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	9,160	1	1
Ethylbenzene	1,030	1	1
Lead	0.0254	1	1
Lead (DIS)	NA	0	0
MTBE	<40	1	0
Toluene	9,300	1	1
Total SVOC	NA	0	-
Xylene	4,950	1	0

MP-31B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	3	0
Ethylbenzene	<5 - <5	3	0
Lead	<0.002 - 0.0191	3	2
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	<2 - <2	3	0
Toluene	<5 - <5	3	0
Total SVOC	ND - 0.0041	3	-
Xylene	<5 - <5	3	0

LEGEND

- MONITORING WELL (HMW) SAMPLED
- MONITORING POINT (MP) SAMPLED
- MONITORING WELL (HMW) NOT SAMPLED
- MONITORING POINT (MP) NOT SAMPLED
- C.V. — COMPARISON VALUE
- (DIS) — DISSOLVED
- ND — NON-DETECT
- NA — NOT ANALYZED
- – — NOT APPLICABLE, NO COMPARISON VALUE FOR TOTAL SVOCs
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA) BASED UPON DATA IN CLAYTON REPORTS DATED APRIL 8, 2004, JANUARY 4, 2006 AND JANUARY 23, 2006. ROST IS A SCREENING TECHNIQUE FOR PRESENCE OF LNAPL.

NOTES:

1. RESULTS FOR BENZENE, MTBE, AND TOTAL BETX IN ug/L. RESULTS FOR TOTAL SVOC, LEAD, AND LEAD (DIS) IN mg/L.
2. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 300
SCALE FEET

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.00106

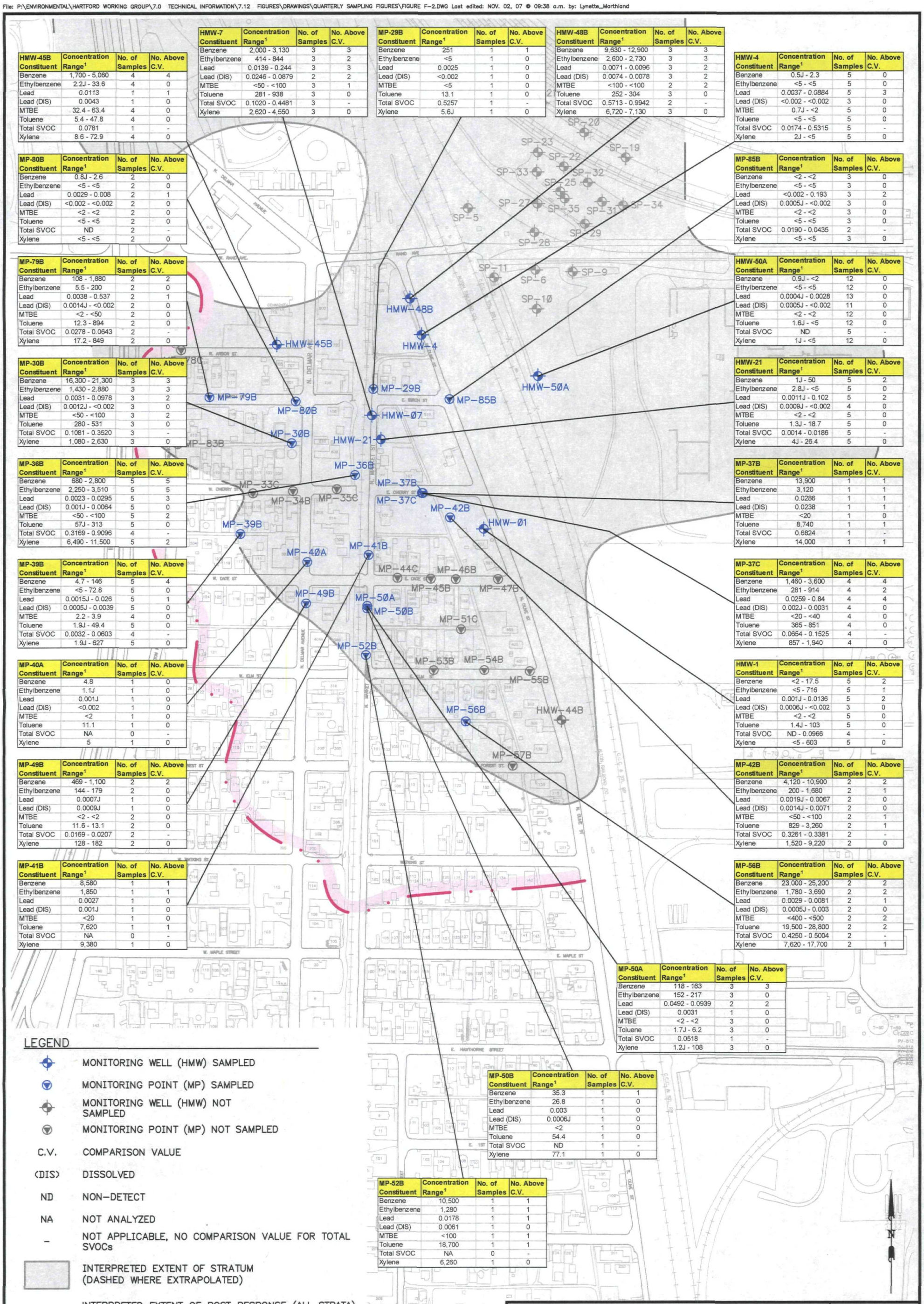
URS

DRN. BY:lrm 9/25/07
DSGN. BY:bh
CHKD. BY:

Summary of Groundwater Analytical Results Dec. 2003 – July 2007 North Olive Stratum

FIG. NO. F-1

File: P:\ENVIRONMENTAL\HARTFORD WORKING GROUP\7.0 TECHNICAL INFORMATION\7.12 FIGURES\DRAWINGS\QUARTERLY SAMPLING FIGURES\FIGURE F-2.DWG Last edited: NOV. 02, 07 @ 09:38 a.m. by: Lynette_Morthland



HMW-45B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1,700 - 5,060	4	4
Ethylbenzene	2.2J - 33.6	4	0
Lead	0.0113	1	1
Lead (DIS)	0.0043	1	0
MTBE	32.4 - 63.4	4	0
Toluene	5.4 - 47.8	4	0
Total SVOC	0.0781	1	-
Xylene	8.6 - 72.9	4	0

MP-80B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.8J - 2.6	2	0
Ethylbenzene	<5 - <5	2	0
Lead	0.0029 - 0.008	2	1
Lead (DIS)	<0.002 - <0.002	2	0
MTBE	<2 - <2	2	0
Toluene	<5 - <5	2	0
Total SVOC	ND	2	-
Xylene	<5 - <5	2	0

MP-79B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	108 - 1,880	2	2
Ethylbenzene	5.5 - 200	2	0
Lead	0.0038 - 0.537	2	1
Lead (DIS)	0.0014J - <0.002	2	0
MTBE	<2 - <50	2	0
Toluene	12.3 - 894	2	0
Total SVOC	0.0278 - 0.0643	2	-
Xylene	17.2 - 849	2	0

MP-30B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	16,300 - 21,300	3	3
Ethylbenzene	1,430 - 2,880	3	3
Lead	0.0031 - 0.0978	3	2
Lead (DIS)	0.0012J - <0.002	3	0
MTBE	<50 - <100	3	2
Toluene	280 - 531	3	0
Total SVOC	0.1081 - 0.3520	3	-
Xylene	1,080 - 2,630	3	0

MP-36B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	680 - 2,800	5	5
Ethylbenzene	2,250 - 3,510	5	5
Lead	0.0023 - 0.0295	5	3
Lead (DIS)	0.001J - 0.0064	5	0
MTBE	<50 - <100	5	2
Toluene	57J - 313	5	0
Total SVOC	0.3169 - 0.9096	4	-
Xylene	6,490 - 11,500	5	2

MP-39B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	4.7 - 146	5	4
Ethylbenzene	<5 - 72.8	5	0
Lead	0.0015J - 0.026	5	1
Lead (DIS)	0.0005J - 0.0039	5	0
MTBE	2.2 - 3.9	4	0
Toluene	1.9J - 49.4	5	0
Total SVOC	0.0032 - 0.0603	4	-
Xylene	1.9J - 627	5	0

MP-40A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	4.8	1	0
Ethylbenzene	1.1J	1	0
Lead	0.001J	1	0
Lead (DIS)	<0.002	1	0
MTBE	<2	1	0
Toluene	11.1	1	0
Total SVOC	NA	0	-
Xylene	5	1	0

MP-49B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	469 - 1,100	2	2
Ethylbenzene	144 - 179	2	0
Lead	0.0007J	1	0
Lead (DIS)	0.0009J	1	0
MTBE	<2 - <2	2	0
Toluene	11.6 - 13.1	2	0
Total SVOC	0.0169 - 0.0207	2	-
Xylene	128 - 182	2	0

MP-41B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	8,580	1	1
Ethylbenzene	1,850	1	1
Lead	0.0027	1	0
Lead (DIS)	0.001J	1	0
MTBE	<20	1	0
Toluene	7,620	1	1
Total SVOC	NA	0	-
Xylene	9,380	1	0

HMW-7 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	2,000 - 3,130	3	3
Ethylbenzene	414 - 844	3	2
Lead	0.0139 - 0.244	3	3
Lead (DIS)	0.0246 - 0.0879	2	2
MTBE	<50 - <100	3	1
Toluene	281 - 938	3	0
Total SVOC	0.1020 - 0.4481	3	-
Xylene	2,620 - 4,550	3	0

MP-29B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	251	1	1
Ethylbenzene	<5	1	0
Lead	0.0025	1	0
Lead (DIS)	<0.002	1	0
MTBE	<5	1	0
Toluene	13.1	1	0
Total SVOC	0.5257	1	-
Xylene	5.6J	1	0

HMW-48B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	9,630 - 12,900	3	3
Ethylbenzene	2,600 - 2,730	3	3
Lead	0.0071 - 0.0096	3	2
Lead (DIS)	0.0074 - 0.0078	3	2
MTBE	<100 - <100	2	2
Toluene	252 - 304	3	0
Total SVOC	0.5713 - 0.9942	2	-
Xylene	6,720 - 7,130	3	0

HMW-4 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.5J - 2.3	5	0
Ethylbenzene	<5 - <5	5	0
Lead	0.0037 - 0.0884	5	3
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	0.7J - <2	5	0
Toluene	<5 - <5	5	0
Total SVOC	0.0174 - 0.5315	5	-
Xylene	2J - <5	5	0

MP-85B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	3	0
Ethylbenzene	<5 - <5	3	0
Lead	<0.002 - 0.193	3	2
Lead (DIS)	0.0005J - <0.002	3	0
MTBE	<2 - <2	3	0
Toluene	<5 - <5	3	0
Total SVOC	0.0190 - 0.0435	2	-
Xylene	<5 - <5	3	0

HMW-50A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.9J - <2	12	0
Ethylbenzene	<5 - <5	12	0
Lead	0.0004J - 0.0028	13	0
Lead (DIS)	0.0005J - <0.002	11	0
MTBE	<2 - <2	12	0
Toluene	1.6J - <5	12	0
Total SVOC	ND	5	-
Xylene	1J - <5	12	0

HMW-21 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1J - 50	5	2
Ethylbenzene	2.8J - <5	5	0
Lead	0.0011J - 0.102	5	2
Lead (DIS)	0.0009J - <0.002	4	0
MTBE	<2 - <2	5	0
Toluene	1.3J - 18.7	5	0
Total SVOC	0.0014 - 0.0186	5	-
Xylene	4J - 26.4	5	0

MP-37B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	13,900	1	1
Ethylbenzene	3,120	1	1
Lead	0.0286	1	1
Lead (DIS)	0.0238	1	1
MTBE	<20	1	0
Toluene	8,740	1	1
Total SVOC	0.6824	1	-
Xylene	14,000	1	1

MP-37C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1,460 - 3,600	4	4
Ethylbenzene	281 - 914	4	2
Lead	0.0259 - 0.84	4	4
Lead (DIS)	0.002J - 0.0031	4	0
MTBE	<20 - <40	4	0
Toluene	365 - 851	4	0
Total SVOC	0.0654 - 0.1525	4	-
Xylene	857 - 1,940	4	0

HMW-1 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - 17.5	5	2
Ethylbenzene	<5 - 716	5	1
Lead	0.001J - 0.0136	5	2
Lead (DIS)	0.0006J - <0.002	3	0
MTBE	<2 - <2	5	0
Toluene	1.4J - 103	5	0
Total SVOC	ND - 0.0966	4	-
Xylene	<5 - 603	5	0

MP-42B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	4,120 - 10,900	2	2
Ethylbenzene	200 - 1,680	2	1
Lead	0.0019J - 0.0067	2	0
Lead (DIS)	0.0014J - 0.0071	2	0
MTBE	<50 - <100	2	1
Toluene	829 - 3,260	2	1
Total SVOC	0.3261 - 0.3381	2	-
Xylene	1,520 - 9,220	2	0

MP-56B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	23,000 - 25,200	2	2
Ethylbenzene	1,780 - 3,690	2	2
Lead	0.0029 - 0.0081	2	1
Lead (DIS)	0.0005J - 0.003	2	0
MTBE	<400 - <500	2	2
Toluene	19,500 - 28,800	2	2
Total SVOC	0.4250 - 0.5004	2	-
Xylene	7,620 - 17,700	2	1

MP-50A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	118 - 163	3	3
Ethylbenzene	152 - 217	3	0
Lead	0.0492 - 0.0939	2	2
Lead (DIS)	0.0031	1	0
MTBE	<2 - <2	3	0
Toluene	1.7J - 6.2	3	0
Total SVOC	0.0518	1	-
Xylene	1.2J - 108	3	0

MP-50B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	35.3	1	1
Ethylbenzene	26.8	1	0
Lead	0.003	1	0
Lead (DIS)	0.0006J	1	0
MTBE	<2	1	0
Toluene	54.4	1	0
Total SVOC	ND	1	-
Xylene	77.1	1	0

MP-52B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	10,500	1	1
Ethylbenzene	1,280	1	1
Lead	0.0178	1	1
Lead (DIS)	0.0061	1	0
MTBE	<100	1	1
Toluene	18,700	1	1
Total SVOC	NA	0	-
Xylene	6,260	1	0

LEGEND

- MONITORING WELL (HMW) SAMPLED
- MONITORING POINT (MP) SAMPLED
- MONITORING WELL (HMW) NOT SAMPLED
- MONITORING POINT (MP) NOT SAMPLED
- C.V. — COMPARISON VALUE
- (DIS) — DISSOLVED
- ND — NON-DETECT
- NA — NOT ANALYZED
- \- — NOT APPLICABLE, NO COMPARISON VALUE FOR TOTAL SVOCs
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA) BASED UPON DATA IN CLAYTON REPORTS DATED APRIL 8, 2004, JANUARY 4, 2006 AND JANUARY 23, 2006. ROST IS A SCREENING TECHNIQUE FOR PRESENCE OF LNAPL.

NOTES:

1. RESULTS FOR BENZENE, MTBE, AND TOTAL BENZENE IN ug/L. RESULTS FOR TOTAL SVOC, LEAD, AND LEAD (DIS) IN mg/L.
2. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 300
SCALE FEET

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

PROJECT NO. 21561445.00106

URS

DRN. BY:lrm 9/25/07
DSGN. BY:bh
CHKD. BY:

Summary of Groundwater Analytical Results Dec. 2003 – July 2007 Rand Stratum

FIG. NO. F-2

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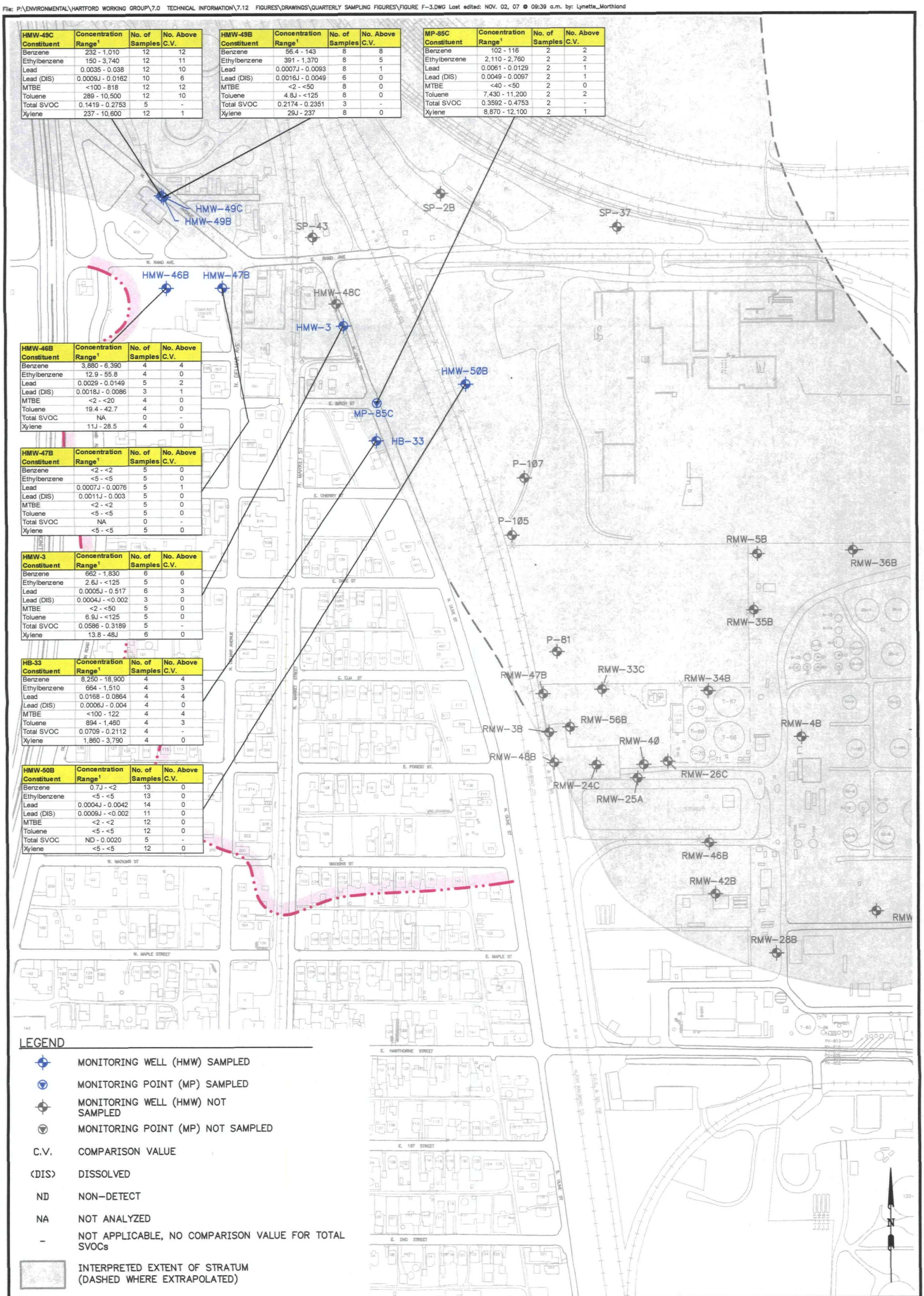


HMW-49C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	232 - 1,010	12	12
Ethylbenzene	150 - 3,740	12	11
Lead	0.0035 - 0.038	12	10
Lead (DIS)	0.0009J - 0.0162	10	6
MTBE	<100 - 818	12	12
Toluene	289 - 10,500	12	10
Total SVOC	0.1419 - 0.2753	5	-
Xylene	237 - 10,600	12	1

HMW-49B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	56.4 - 143	8	8
Ethylbenzene	391 - 1,370	8	5
Lead	0.0007J - 0.0093	8	1
Lead (DIS)	0.0016J - 0.0049	6	0
MTBE	<2 - <50	8	0
Toluene	4.8J - <125	8	0
Total SVOC	0.2174 - 0.2351	3	-
Xylene	29J - 237	8	0

MP-85C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	102 - 116	2	2
Ethylbenzene	2,110 - 2,760	2	2
Lead	0.0061 - 0.0129	2	1
Lead (DIS)	0.0049 - 0.0097	2	1
MTBE	<40 - <50	2	0
Toluene	7,430 - 11,200	2	2
Total SVOC	0.3592 - 0.4753	2	-
Xylene	8,870 - 12,100	2	1

HMW-46B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	3,880 - 6,390	4	4
Ethylbenzene	12.9 - 55.8	4	0
Lead	0.0029 - 0.0149	5	2
Lead (DIS)	0.0018J - 0.0086	3	1
MTBE	<2 - <20	4	0
Toluene	19.4 - 42.7	4	0
Total SVOC	NA	0	-
Xylene	11J - 28.5	4	0

HMW-47B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	5	0
Ethylbenzene	<5 - <5	5	0
Lead	0.0007J - 0.0076	5	1
Lead (DIS)	0.0011J - 0.003	5	0
MTBE	<2 - <2	5	0
Toluene	<5 - <5	5	0
Total SVOC	NA	0	-
Xylene	<5 - <5	5	0

HMW-3 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	662 - 1,830	6	6
Ethylbenzene	2.6J - <125	5	0
Lead	0.0005J - 0.517	6	3
Lead (DIS)	0.0004J - <0.002	3	0
MTBE	<2 - <50	5	0
Toluene	6.9J - <125	5	0
Total SVOC	0.0586 - 0.3189	5	-
Xylene	13.8 - 48J	6	0

HB-33 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	8,250 - 18,900	4	4
Ethylbenzene	664 - 1,510	4	3
Lead	0.0168 - 0.0864	4	4
Lead (DIS)	0.0006J - 0.004	4	0
MTBE	<100 - 122	4	4
Toluene	894 - 1,460	4	3
Total SVOC	0.0709 - 0.2112	4	-
Xylene	1,860 - 3,790	4	0

HMW-50B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.7J - <2	13	0
Ethylbenzene	<5 - <5	13	0
Lead	0.0004J - 0.0042	14	0
Lead (DIS)	0.0009J - <0.002	11	0
MTBE	<2 - <2	12	0
Toluene	<5 - <5	12	0
Total SVOC	ND - 0.0020	5	-
Xylene	<5 - <5	12	0

LEGEND

- MONITORING WELL (HMW) SAMPLED
- MONITORING POINT (MP) SAMPLED
- MONITORING WELL (HMW) NOT SAMPLED
- MONITORING POINT (MP) NOT SAMPLED
- C.V. — COMPARISON VALUE
- (DIS) — DISSOLVED
- ND — NON-DETECT
- NA — NOT ANALYZED
- \- — NOT APPLICABLE, NO COMPARISON VALUE FOR TOTAL SVOCs
- INTERPRETED EXTENT OF STRATUM (DASHED WHERE EXTRAPOLATED)
- INTERPRETED EXTENT OF ROST RESPONSE (ALL STRATA) BASED UPON DATA IN CLAYTON REPORTS DATED APRIL 8, 2004, JANUARY 4, 2006 AND JANUARY 23, 2006. ROST IS A SCREENING TECHNIQUE FOR PRESENCE OF LNAPL.

NOTES:

1. RESULTS FOR BENZENE, MTBE, AND TOTAL BENZENE IN ug/L. RESULTS FOR TOTAL SVOC, LEAD, AND LEAD (DIS) IN mg/L.
2. MAP CREATED FROM BASEMAP PROVIDED BY BVNA.

0 300
SCALE FEET

HARTFORD WORKING GROUP PLUME SITE
HARTFORD, ILLINOIS

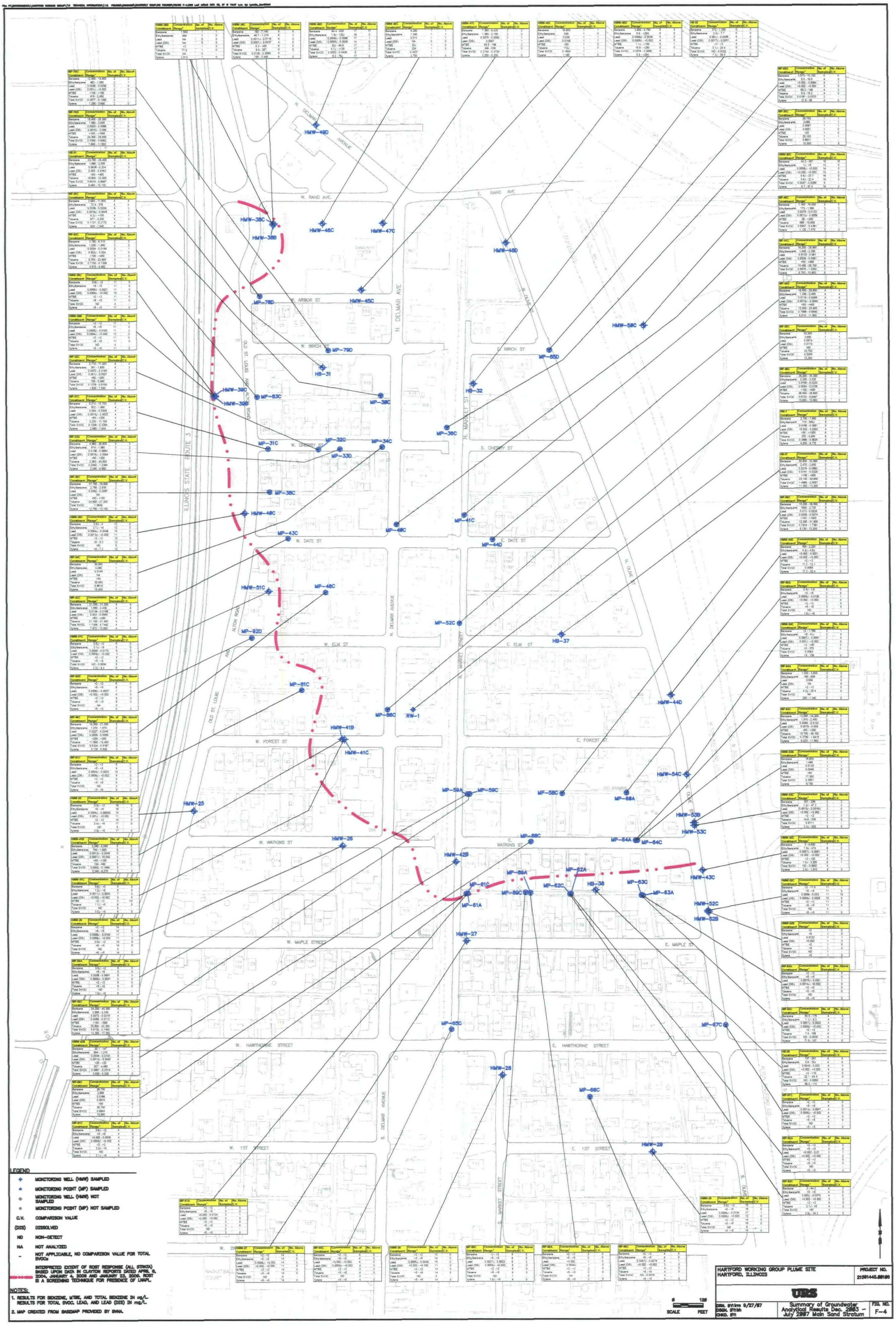
PROJECT NO. 21561445.00106

URS

DRN. BY:lrm 9/26/07
DSGN. BY:bh
CHKD. BY:

Summary of Groundwater Analytical Results Dec. 2003 – July 2007 EPA Stratum

FIG. NO. F-3



HMW-38B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	7,550	1	1
Ethylbenzene	484	1	0
Lead	NA	0	0
Lead (DIS)	NA	0	0
MTBE	<2	1	0
Toluene	77.9	1	0
Total SVOC	NA	0	-
Xylene	2,910	1	0

HMW-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	193 - 7,190	6	6
Ethylbenzene	40.7 - 1,210	6	3
Lead	0.0011J - 0.0119	6	2
Lead (DIS)	0.0007J - 0.0037	4	0
MTBE	8.3 - <80	6	0
Toluene	9.9 - 267	6	0
Total SVOC	0.0130 - 0.2099	5	1
Xylene	139 - 3,440	6	0

HMW-46D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	84.4 - 620	17	17
Ethylbenzene	1.4J - 120J	16	0
Lead	0.0006J - 0.0086	17	1
Lead (DIS)	0.0005J - 0.0034	14	0
MTBE	32J - 84.6	17	2
Toluene	4.7J - <125	17	0
Total SVOC	0.0022 - 0.0426	5	1
Xylene	6.2 - 76	17	0

HMW-46C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	9,200	1	1
Ethylbenzene	1,340	1	1
Lead	0.012	1	1
Lead (DIS)	NA	0	0
MTBE	32J	1	0
Toluene	224	1	0
Total SVOC	0.2437	1	1
Xylene	3,700	1	0

HMW-47C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1,360 - 5,420	2	2
Ethylbenzene	1,360 - 2,150	2	2
Lead	0.0075 - 0.0092	2	1
Lead (DIS)	0.0067	1	1
MTBE	83.5 - 196	2	2
Toluene	340 - 536	2	2
Total SVOC	0.2744 - 0.3734	2	2
Xylene	3,200 - 5,200	2	2

HMW-45C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	16,600	1	1
Ethylbenzene	636	1	0
Lead	0.029	1	1
Lead (DIS)	0.0148	1	1
MTBE	<50	1	0
Toluene	110J	1	0
Total SVOC	0.1604	1	1
Xylene	1,160	1	0

HMW-48D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	3,600 - 6,750	5	5
Ethylbenzene	5.8 - <250	5	0
Lead	0.0005J - 0.0036	5	0
Lead (DIS)	0.0005J - <0.002	4	0
MTBE	1.1J - <100	5	0
Toluene	15.6 - <250	5	0
Total SVOC	0.0376 - 0.0682	4	-
Xylene	5.5 - <250	5	0

HB-32 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	312 - 1,330	5	5
Ethylbenzene	2.3J - 7.7	5	0
Lead	0.00JJ - 0.0039	5	0
Lead (DIS)	0.0017J - 0.0031	4	0
MTBE	<2 - <2	4	0
Toluene	3.1J - 24.9	5	0
Total SVOC	ND - 0.0102	4	-
Xylene	1.5J - 28.1	5	0

MP-78D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	12,800 - 18,800	2	2
Ethylbenzene	482 - 1,090	2	1
Lead	0.0038 - 0.0039	2	0
Lead (DIS)	0.001J - <0.002	2	0
MTBE	<100 - <100	2	0
Toluene	478 - 2,450	2	1
Total SVOC	0.0877 - 0.1380	2	-
Xylene	1,290 - 3,680	2	0

MP-79D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	15,400 - 20,300	3	3
Ethylbenzene	1,590 - 2,600	3	3
Lead	0.0023 - 0.0066	3	0
Lead (DIS)	0.0015J - 0.006	3	0
MTBE	<100 - <1000	3	0
Toluene	24,300 - 39,600	3	3
Total SVOC	0.5380 - 0.6062	2	-
Xylene	7,660 - 11,500	3	2

HB-31 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	23,700 - 35,400	3	3
Ethylbenzene	1,680 - 2,050	3	3
Lead	0.0836 - 0.204	3	3
Lead (DIS)	0.005 - 0.0163	3	3
MTBE	<50 - <400	2	2
Toluene	16,600 - 22,000	3	3
Total SVOC	0.6019 - 0.6667	3	-
Xylene	6,480 - 10,100	3	-

MP-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	2,940 - 11,900	4	4
Ethylbenzene	72.9 - 376	4	0
Lead	0.0036 - 0.0229	4	1
Lead (DIS)	0.0016J - 0.0045	3	0
MTBE	8.2J - <100	4	1
Toluene	677 - 3,230	4	0
Total SVOC	0.1121 - 0.2172	4	-
Xylene	429 - 1,540	4	0

MP-83C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	3,790 - 9,310	3	3
Ethylbenzene	1,030 - 1,960	3	3
Lead	0.0034 - 0.0159	3	1
Lead (DIS)	0.002J - 0.004	3	0
MTBE	<100 - <400	3	3
Toluene	5,760 - 22,900	3	3
Total SVOC	0.7153 - 0.7339	2	-
Xylene	4,610 - 8,880	3	0

HMW-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.6J - <2	11	0
Ethylbenzene	<5 - <5	11	0
Lead	0.0005J - 0.0021	11	0
Lead (DIS)	0.0005J - <0.002	10	0
MTBE	<2 - <2	11	0
Toluene	<5 - <5	11	0
Total SVOC	ND	4	-
Xylene	<5 - <5	11	0

HMW-38B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	11	0
Ethylbenzene	<5 - <5	11	0
Lead	0.0005J - 0.0183	11	2
Lead (DIS)	0.0004J - <0.002	12	0
MTBE	<2 - <2	11	0
Toluene	<5 - <5	11	0
Total SVOC	ND	4	-
Xylene	<5 - <5	11	0

MP-32C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	2,710 - 17,200	4	4
Ethylbenzene	351 - 1,630	4	3
Lead	0.0072 - 0.0193	4	3
Lead (DIS)	0.001J - 0.0037	3	0
MTBE	<50 - <200	3	2
Toluene	709 - 5,940	4	3
Total SVOC	0.1279 - 0.9100	4	-
Xylene	1,620 - 7,850	4	0

MP-31C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	5,210 - 13,700	4	4
Ethylbenzene	922 - 1,880	4	4
Lead	0.004 - 0.0309	4	3
Lead (DIS)	0.0015J - 0.0023	4	0
MTBE	<50 - <200	4	3
Toluene	3,200 - 11,100	4	4
Total SVOC	0.1209 - 0.3384	4	-
Xylene	2,980 - 7,840	4	0

MP-36C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	4,980 - 25,600	3	3
Ethylbenzene	614 - 1,880	3	2
Lead	0.0108 - 0.0654	3	3
Lead (DIS)	0.0016J - 0.0094	3	1
MTBE	<50 - <200	3	2
Toluene	2,260 - 24,600	3	3
Total SVOC	0.2042 - 1.2384	3	-
Xylene	2,040 - 9,860	3	0

MP-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	31,700 - 38,600	2	2
Ethylbenzene	2,780 - 2,830	2	2
Lead	0.0362 - 0.0387	2	2
Lead (DIS)	NA	0	0
MTBE	<50 - <100	2	1
Toluene	24,600 - 27,200	2	2
Total SVOC	1.0649	1	1
Xylene	12,700 - 13,100	2	2

HMW-49C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.6J - 4	12	0
Ethylbenzene	2.7J - <5	12	0
Lead	0.0004J - 0.0049	15	0
Lead (DIS)	0.001J - <0.002	11	0
MTBE	<2 - <2	12	0
Toluene	<5 - 5.3	12	0
Total SVOC	ND	5	-
Xylene	<5 - 7.2	12	0

MP-34C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	34,500	1	1
Ethylbenzene	3,380	1	1
Lead	0.0149	1	1
Lead (DIS)	NA	0	0
MTBE	<50	1	0
Toluene	32,400	1	1
Total SVOC	0.9619	1	-
Xylene	15,400	1	-

MP-43C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	21,200 - 31,300	4	4
Ethylbenzene	1,550 - 2,430	4	4
Lead	0.0134 - 0.0188	4	4
Lead (DIS)	0.002 - 0.0068	3	0
MTBE	<50 - <400	4	3
Toluene	21,100 - 31,400	4	4
Total SVOC	1.1309 - 4.1442	4	-
Xylene	7,470 - 13,000	4	3

HMW-51C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.5J - <2	5	0
Ethylbenzene	2.1J - <5	5	0
Lead	0.0088 - 0.0176	6	6
Lead (DIS)	0.0009J - <0.002	3	0
MTBE	<2 - <2	6	0
Toluene	<5 - <5	6	0
Total SVOC	ND - 0.0036	5	-
Xylene	2.2J - 8.4	6	0

MP-92D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	6	0
Ethylbenzene	<5 - <5	6	0
Lead	0.0008J - 0.0037	7	0
Lead (DIS)	<0.002 - <0.002	6	0
MTBE	<2 - <2	6	0
Toluene	<5 - <5	6	0
Total SVOC	NA	0	-
Xylene	<5 - <5	6	0

MP-86C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	16,300 - 21,100	2	2
Ethylbenzene	1,270 - 1,570	2	2
Lead	0.0227 - 0.0245	2	2
Lead (DIS)	0.0029 - 0.0095	3	0
MTBE	<200 - <200	2	2
Toluene	11,600 - 14,400	2	2
Total SVOC	0.6324 - 0.9167	2	-
Xylene	5,130 - 9,930	2	0

MP-81C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	9	0
Ethylbenzene	<5 - <5	9	0
Lead	0.0004J - 0.0023	10	0
Lead (DIS)	0.0006J - <0.002	9	0
MTBE	<2 - <2	9	0
Toluene	<5 - <5	9	0
Total SVOC	ND	2	-
Xylene	<5 - <5	9	-

HMW-25 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.8J - <2	16	0
Ethylbenzene	<5 - <5	16	0
Lead	0.0004J - 0.00859	15	0
Lead (DIS)	0.001J - <0.002	11	0
MTBE	<2 - <2	14	0
Toluene	2.4J - <5	17	0
Total SVOC	ND	5	-
Xylene	3.9J - <5	17	0

HMW-41B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	3,380 - 5,080	5	5
Ethylbenzene	760 - 1,620	5	5
Lead	0.0013J - 0.0049	5	0
Lead (DIS)	0.0007J - <0.002	4	0
MTBE	<40 - <100	5	0
Toluene	134 - 482	5	0
Total SVOC	0.0802 - 0.1986	5	-
Xylene	3,240 - 6,270	5	0

HMW-41C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.9J - <2	5	0
Ethylbenzene	1.2J - <5	5	0
Lead	0.001J - 0.0031	7	0
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	<2 - <2	5	0
Toluene	1.1J - <5	5	0
Total SVOC	ND	5	-
Xylene	3.3J - <5	5	0

HMW-26 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	14	0
Ethylbenzene	<5 - <5	14	0
Lead	0.0008J - 0.0159	17	0
Lead (DIS)	0.0008J - <0.002	11	0
MTBE	0.6J - <2	14	0
Toluene	<5 - <5	14	0
Total SVOC	ND	5	-
Xylene	<5 - <5	14	0

MP-89A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.6J - <2	5	0
Ethylbenzene	<5 - <5	5	0
Lead	0.0036 - 0.0641	5	3
Lead (DIS)	0.0005J - 0.0031	4	0
MTBE	<2 - <2	5	0
Toluene	<5 - <5	5	0
Total SVOC	ND	1	-
Xylene	1.8J - <5	5	0

MP-62C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	24,200 - 40,300	4	4
Ethylbenzene	2,590 - 3,330	4	4
Lead	0.0072 - 0.0219	4	3
Lead (DIS)	0.0069 - 0.0112	3	2
MTBE	<100 - <500	4	4
Toluene	30,800 - 43,300	4	4
Total SVOC	0.6132 - 0.7462	4	-
Xylene	12,300 - 17,300	4	4

HMW-42B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	20.1 - 147	5	4
Ethylbenzene	884 - 1,210	5	4
Lead	0.0034 - 0.0143	5	2
Lead (DIS)	0.0013J - 0.0043	4	0
MTBE	<20 - <20	5	0
Toluene	827 - 4,480	5	4
Total SVOC	0.0867 - 0.3319	4	-
Xylene	3,630 - 5,320	5	0

MP-66C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	28,700	1	1
Ethylbenzene	2,860	1	1
Lead	0.0198	1	1
Lead (DIS)	0.0074	1	1
MTBE	<50	1	0
Toluene	35,700	1	1
Total SVOC	0.8843	1	-
Xylene	13,600	1	1

MP-61C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.6J - <2	4	0
Ethylbenzene	<5 - <5	3	0
Lead	<0.002 - 0.0035	4	0
Lead (DIS)	0.0005J - <0.002	4	0
MTBE	<2 - <2	4	0
Toluene	2.3J - <5	4	0
Total SVOC	ND	2	-
Xylene	2.1J - <5	4	0

MP-81A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	3	0
Ethylbenzene	<5 - <5	3	0
Lead	<0.002 - 0.0134	3	0
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	<2 - <2	3	0
Toluene	<5 - <5	3	0
Total SVOC	ND	2	-
Xylene	<5 - <5	3	0

HMW-27 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	14	0
Ethylbenzene	<5 - <5	14	0
Lead	0.0008J - <0.002	14	0
Lead (DIS)	<0.002 - <0.002	11	0
MTBE	<2 - <2	14	0
Toluene	<5 - <5	14	0
Total SVOC	ND	5	-
Xylene	<5 - <5	14	0

MP-65C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	4	0
Ethylbenzene	<5 - <5	4	0
Lead	0.0008J - 0.0049	4	0
Lead (DIS)	0.0006J - <0.002	4	0
MTBE	<2 - <2	4	0
Toluene	<5 - <5	4	0
Total SVOC	ND	1	-
Xylene	<5 - <5	4	0

HMW-28 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	14	0
Ethylbenzene	<5 - <5	14	0
Lead	0.0095J - 0.0048	15	0
Lead (DIS)	<0.002 - <0.002	11	0
MTBE	<2 - <2	14	0
Toluene	<5 - <5	14	0
Total SVOC	ND	5	-
Xylene	<5 - <5	14	0

MP-66C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1J - <2	8	0
Ethylbenzene	<5 - <5	8	0
Lead	0.0007J - 0.0623	8	2
Lead (DIS)	0.0005J - <0.002	8	0
MTBE	<2 - <2	8	0
Toluene	<5 - <5	8	0
Total SVOC	ND	1	-
Xylene	1.5J - <5	8	0

MP-89A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	2	0
Ethylbenzene	<5 - <5	2	0
Lead	<0.002	1	0
Lead (DIS)	0.0004J	1	0
MTBE	<2 - <2	2	0
Toluene	<5 - <5	2	0
Total SVOC	NA	0	-
Xylene	<5 - <5	2	0

MP-66C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - <2	4	0
Ethylbenzene	<5 - <5	4	0
Lead	0.0007J - 0.0079	5	1
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	<2 - <2	4	0
Toluene	<5 - <5	4	0
Total SVOC	ND - 0.0070	1	-
Xylene	<5 - <5	4	0

HMW-29 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.6J - <2	15	0
Ethylbenzene	<5 - <5	15	0
Lead	0.0006J - 0.0134	17	1
Lead (DIS)	0.0006J - <0.002	12	0
MTBE	<2 - <2	14	0
Toluene	<5 - <5	15	0
Total SVOC	ND	5	-
Xylene	<5 - <5	15	0

MP-49D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	3,910 - 15,300	4	4
Ethylbenzene	5.6 - 19.6	4	0
Lead	<0.002 - 0.0084	4	0
Lead (DIS)	<0.002 - <0.002	3	0
MTBE	89.2 - 146	4	3
Toluene	5.9 - 19.2	4	0
Total SVOC	0.0181 - 0.0370	2	-
Xylene	21.6 - 59	4	0

MP-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	28,700	1	1
Ethylbenzene	2,060	1	1
Lead	0.0997	1	1
Lead (DIS)	0.0051	1	0
MTBE	<20	1	0
Toluene	35,100	1	1
Total SVOC	0.6621	1	-
Xylene	10,000	1	0

HMW-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	42.2 - 247	16	16
Ethylbenzene	1J - <5	13	0
Lead	0.0006J - <0.002	14	0
Lead (DIS)	<0.002 - <0.002	10	0
MTBE	3.4J - 23.7	16	0
Toluene	3.6J - 22.4	16	0
Total SVOC	0.0247 - 0.0289	5	-
Xylene	6.7 - 57.4	16	0

MP-46C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1,190 - 16,000	3	3
Ethylbenzene	179 - 1,980	3	3
Lead	0.0079 - 0.0123	3	3
Lead (DIS)	0.0013J - 0.0059	3	0
MTBE	29 - <200	3	0
Toluene	695 - 15,600	3	2
Total SVOC	0.0947 - 0.4381	3	-
Xylene	1,120 - 7,070	3	0

MP-41C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	16,200 - 28,900	5	5
Ethylbenzene	1,440 - 2,350	5	5
Lead	0.0132 - 0.061	5	5
Lead (DIS)	0.0028 - 0.0061	4	0
MTBE	<50 - <400	5	4
Toluene	15,400 - 28,700	5	5
Total SVOC	0.6670 - 1.3282	3	-
Xylene	6,700 - 10,800	5	5

MP-44C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	15,500 - 25,900	4	4
Ethylbenzene	1,330 - 2,400	4	4
Lead	0.0119 - 0.0499	4	4
Lead (DIS)	0.0016J - 0.0044	3	0
MTBE	<50 - <400	4	3
Toluene	12,000 - 25,800	4	4
Total SVOC	0.7998 - 0.8840	4	-
Xylene	6,610 - 11,900	4	3

MP-85C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	33,200	1	1
Ethylbenzene	2,650	1	1
Lead	0.0373	1	1
Lead (DIS)	0.0174	1	1
MTBE	<50	1	0
Toluene	33,700	1	1
Total SVOC	0.3005	1	-
Xylene	13,300	1	1

MP-86C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	29,200 - 34,300	2	2
Ethylbenzene	2,230 - 2,320	2	2
Lead	0.0169 - 0.0233	2	2
Lead (DIS)	0.0034 - 0.0109	2	2
MTBE	<100 - <400	2	0
Toluene	26,600 - 29,900	2	2
Total SVOC	0.6723 - 0.8487	2	-
Xylene	10,600 - 10,900	2	2

MP-1 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	2,790 - 7,660	8	8
Ethylbenzene	114 - 540J	8	0
Lead	0.0166 - 0.0851	8	8
Lead (DIS)	<0.002 - 0.0202	8	2
MTBE	<50 - <1000	8	3
Toluene	232 - 4,240	8	3
Total SVOC	0.3988 - 0.9826	8	-
Xylene	4,200 - 8,770	8	0

MP-37 Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	30,800 - 32,900	3	3
Ethylbenzene	2,470 - 2,600	3	3
Lead	0.0219 - 0.0992	3	3
Lead (DIS)	0.0141 - 0.0226	3	3
MTBE	<100 - <600	3	3
Toluene	23,100 - 30,600	3	3
Total SVOC	1.4980 - 2.0887	3	-
Xylene	11,050 - 13,200	3	3

MP-38C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	13,200 - 38,500	5	5
Ethylbenzene	1000 - 2,730	5	5
Lead	0.013 - 0.0208	5	5
Lead (DIS)	0.0039 - 0.0074	4	0
MTBE	<100 - <1000	5	5
Toluene	12,300 - 31,900	5	5
Total SVOC	0.7814 - 1.7381	4	-
Xylene	6,130 - 13,200	5	3

HMW-44D Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	168 - 2,220	2	2
Ethylbenzene	4.2J - 4.9J	2	0
Lead	<0.002 - 0.0021	2	0
Lead (DIS)	<0.002 - <0.002	2	0
MTBE	<2 - <2	2	0
Toluene	11.2 - 12.1	2	0
Total SVOC	0.0088	1	-
Xylene	17.2 - 32.4	2	0

MP-89A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	0.9J - 3.8	3	0
Ethylbenzene	<5 - <5	3	0
Lead	0.0006J - 0.0136	3	1
Lead (DIS)	<0.002 - <0.002	2	0
MTBE	<2 - <2	3	0
Toluene	<5 - <5	3	0
Total SVOC	ND	2	-
Xylene	1.6J - <5	3	0

HMW-54C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	<2 - 1.7J	2	0
Ethylbenzene	<5 - 41J	2	0
Lead	0.0007J - 0.0061	2	0
Lead (DIS)	0.001J - <0.002	2	0
MTBE	<2 - <50	2	0
Toluene	<5 - 375	2	0
Total SVOC	0.0063	1	-
Xylene	<5 - 138	2	0

MP-54A Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	1,000 - 3,800	2	2
Ethylbenzene	160 - 609	2	0
Lead	0.004	1	0
Lead (DIS)	NA	0	0
MTBE	<2 - <2	2	0
Toluene	4.3J - 25.4	2	0
Total SVOC	NA	0	-
Xylene	230 - 1,340	2	0

MP-64C Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	13,000 - 34,200	3	3
Ethylbenzene	1,910 - 2,450	3	3
Lead	0.0094 - 0.0123	3	3
Lead (DIS)	0.0079 - 0.008	3	3
MTBE	<50 - <200	3	0
Toluene	15,700 - 38,100	3	3
Total SVOC	0.3790 - 1.0415	2	-
Xylene	9,020 - 11,900	3	2

HMW-53B Constituent	Concentration Range[1]	No. of Samples	No. Above C.V.
Benzene	16,800	1	1
Ethylbenzene	1,480	1	1
Lead	0.0135	1	1
Lead (DIS)	0.