2007 KEY WELL SAMPLING REPORT

SAIC Project 01-1633-00-0255-107

Prepared for:

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York, PA 17402

September 2007

Science Applications International Corporation
6310 Allentown Boulevard / Harrisburg, PA 17112 / tel: 717.901.8100 / www.saic.com

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6310 Allentown Boulevard
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(717) 901-8100

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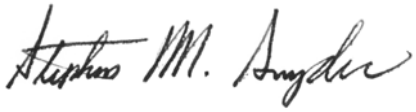
Respectfully submitted,

Scott L. McFeaters, P.G.
Project Manager



Stephen M. Snyder, P.G.
Project Director

TABLE OF CONTENTS

Page

LIST OF ACRONYMS ..... Preceding Text

1.0 INTRODUCTION **1**

2.0 GROUNDWATER ELEVATION DATA **2**

3.0 KEY WELL SAMPLING PROCESS **5**

4.0 KEY WELL SAMPLING RESULTS **7**

4.1 NPBA Groundwater Chemistry 7
4.2 Trichloroethane (TCA) Tank Area Groundwater Chemistry 8
4.3 WPL Groundwater Chemistry 9
4.4 SPBA Groundwater Chemistry 11
4.5 Eastern Property Boundary Area Groundwater Chemistry 12
4.6 Additional Site-Wide Groundwater Chemistry Data 13
4.7 Quality Assurance/Quality Control (QA/QC) 16

LIST OF FIGURES

Figure 1, Site Location Map ..... Following Text
Figure 2, Key Well Location Map ..... Following Text
Figure 3, Groundwater Table Contours – June 20, 2007 ..... Following Text
Figure 4, Key Well Chemistry Map, Total VOCs ..... Following Text
Figure 5, Key Well Chemistry Map, Trichloroethene (TCE) ..... Following Text
Figure 6, Key Well Chemistry Map, Tetrachloroethene (PCE) ..... Following Text
Figure 7, Key Well Chemistry Map, Dissolved Chromium ..... Following Text
Figure 8, Key Well Chemistry Map, Hexavalent Chromium ..... Following Text
Figure 9, TCE in NPBA Key Monitoring Wells ..... Following Text
Figure 10, TCE in TCA Area Monitoring Wells ..... Following Text
Figure 11A, TCE in Northern WPL Monitoring Wells ..... Following Text
Figure 11B, TCE in Northern WPL Monitoring Wells ..... Following Text
Figure 12, TCE in Southern WPL Monitoring Wells ..... Following Text
Figure 13, PCE in Southern WPL Monitoring Wells ..... Following Text
Figure 14, TCE in SPBA Monitoring Wells ..... Following Text
Figure 15, TCE in Eastern Area Monitoring Wells ..... Following Text
Figure 16, PCE in Eastern Area Monitoring Wells ..... Following Text

LIST OF TABLES

Table 1, Summary of Monitoring Wells Sampled in 2007 ..... Following Text
Table 2, Site-wide Groundwater Levels and Elevation Data ..... Following Text
Table 3, Hydraulic Gradient Data ..... Following Text
Table 4, Groundwater Quality Analyses Summary June 2007 Key Well Sampling Event ..... Following Text

LIST OF ACRONYMS

°C	-	degrees Celsius
µg/L	-	micrograms per liter
cis-1,2-DCE	-	cis-1,2-dichloroethene
EPBA	-	Eastern Property Boundary Area
EPA	-	United States Environmental Protection Agency
Harley-Davidson	-	Harley-Davidson Motor Company Operations, Inc.
MCL	-	maximum contaminant level
mg/L	-	milligrams per liter
NPBA	-	Northeast Property Boundary Area
PCE	-	tetrachloroethene
ppm	-	parts per million
QAPP	-	Quality Assurance Project Plan
QA/QC	-	quality assurance/quality control
QC	-	quality control
RPD	-	relative percent difference
SAIC	-	Science Applications International Corporation
SPBA	-	Southern Property Boundary Area
STL	-	Severn Trent Laboratories, Inc.
TCA	-	1,1,1-trichloroethane
TCE	-	trichloroethene
TCL	-	target compound list
VOC	-	volatile organic compound
WPL	-	West Parking Lot

1.0 INTRODUCTION

Science Applications International Corporation (SAIC) has prepared this report to summarize the results of the 2007 key well sampling event for Harley-Davidson Motor Company Operations, Inc. (Harley-Davidson). The Harley-Davidson York Vehicle Operations facility is located in Springettsbury Township, York, Pennsylvania, as shown on Figure 1. This report covers activities conducted during June 2007.

A key well sampling program was initiated in February 1992, in which a subset of wells was selected as key wells to be sampled for the following purposes:

- To establish a data base of groundwater quality.
- To monitor changes in groundwater chemistry across the site.

Each year, available information is reviewed, and the key well sampling plan is amended, as necessary, to meet the goals of the program. In 2006, a total of 47 wells were sampled as part of the key well sampling program. This year, the same list of key wells was utilized. Table 1 provides a summary of the 47 wells that were sampled in 2007. The attached Figure 2 illustrates the locations of the key wells, extraction wells, and other monitoring wells.

2.0 GROUNDWATER ELEVATION DATA

The depth to groundwater was measured in all available site-wide groundwater wells on June 20, 2007. Groundwater measurements were taken in 119 on-site monitoring wells, groundwater collection wells, and piezometers during this event. Additionally, a depth to groundwater was measured in one off-site location (RW-5) on this same date.

The depth-to-groundwater data and the groundwater surface elevation data are summarized on Table 2. Figure 2 identifies the location of each well at the site, as well as its classification as a groundwater extraction well (circle with a cross and two quadrants filled in), a key groundwater monitoring well (circle with a dot inside), or a groundwater monitoring well (circle with a cross and all quadrants empty).

Figure 3 presents the interpreted groundwater table surface from groundwater levels measured on June 20, 2007. The configuration of the groundwater table at the site is generally consistent with previous monitoring, which has indicated a horizontal gradient toward the west-southwest. The groundwater table gradient determined from the June 2007 data is relatively steep beneath the eastern portion of the site, which is underlain by sandstone bedrock. The groundwater table gradient is relatively flat beneath the western portion of the site, which is underlain by limestone bedrock.

There is a significantly large area centered around the Softail facility (Building 3) in which no monitoring wells currently exist. Groundwater contours in this area were adjusted to account for known surface seeps and the elevations of groundwater depression trenches actively collecting groundwater at the time of the survey. The trench locations and elevations are shown on Figures 2 and 3.

Figure 3 displays general areas of groundwater depression as depicted by closed contours around active collection (pumping) wells at the site. Groundwater capture areas have also been estimated on Figure 3 using green lines. The capture zone boundaries represent a groundwater divide that is created by active pumping of collection wells. Groundwater on the inside of the

capture zone boundary (i.e., toward the collection well) will flow toward the collection well, while water on the outside of the capture zone boundary will flow in the direction of the natural gradient.

The capture areas indicated on Figure 3 were estimated by SAIC using preexisting knowledge obtained from groundwater pumping tests performed during the initial design phase of the groundwater collection systems, along with site-specific data including an evaluation of groundwater flow paths and a review of measured hydraulic gradients. The western extent of the capture zone for the west parking lot (WPL) wells shown on Figure 3 is based on very limited information, due to the proximity of the property line. It is suspected that this capture zone extends further to the west. Likewise, the northern limit of the capture zone in the northeast property boundary area (NPBA) is suspected to extend possibly an additional 100 feet to the north, based on initial design pumping tests for this well field.

Table 3 has been prepared to compare the groundwater head elevation changes at six locations across the site where multilevel piezometers exist. In general, mild upward vertical gradients are present beneath the northern portion of the WPL, the landfill area, and in three piezometers (MW-43, MW-70, and MW-86) that are constructed along the sandstone/limestone geologic contact at the site. Downward vertical gradients are evident from the data collected for the piezometers located in the southern west parking lot and the south property boundary area (SPBA). Data from two piezometers at the NPBA (MW-18 and MW-20) indicate a mild downward gradient. However, a third piezometer at the NPBA (MW-16) reflects a strong upward gradient that at times (but not in June 2007) is marked by the presence of artesian conditions in the deep piezometer.

A review of the groundwater contours on Figure 3 indicates an area of groundwater mounding just north of Route 30 near well cluster MW-40S/D. A review of historical groundwater elevation data indicates that a very mild (0.001 to 0.002) groundwater gradient (sometimes up, sometimes down) typically exists at this monitoring location. However, the June 2007 groundwater elevation data suggest a strong (0.1) downward gradient existed at this time. One

possible explanation of this anomaly is that artificial recharge may be occurring periodically to the shallow groundwater in this area due to interconnections with the storm water basins that lie between Route 30 and Eden Road.

3.0 KEY WELL SAMPLING PROCESS

The key well sampling event was conducted between June 25 and June 29, 2007, subsequent to the site-wide groundwater level measurements and the sampling of extraction wells. SAIC utilized the following sample collection methodology:

1. Prior to the initiation of well purging activities, the depth to water was measured to the nearest 0.01 foot with an electronic water indicating probe.

2. Prior to sampling, three standing volumes of water were purged from each well using a submersible pump. Where well yields were low, the maximum practical volume was purged prior to sampling. Adequate purging of a well before sampling allows for the collection of a groundwater sample that is representative of aquifer conditions. All purge water was containerized and processed through the on-site groundwater treatment system via the Softail lift station.

   Decontamination of the pump between sampling locations was performed using an Alconox® solution wash with a deionized water rinse to prevent cross-contamination of the samples. Clean disposable gloves were used when handling the pump and sampling equipment.

3. Groundwater samples were collected as soon as practical after purging was completed. The groundwater samples were collected from each monitoring well with a new disposable polyethylene bailer. Samples for dissolved metals were field-filtered using a barrel filter apparatus and a 0.45-micron filter.

4. Identification labels were immediately affixed to the sample containers. The containers were then placed in coolers and chilled to approximately 4 degrees Celsius (°C) for transport to Severn Trent Laboratories, Inc. (STL) under chain-of-custody protocol.

5. During the purging process and after the collection of laboratory samples, SAIC collected a representative amount of water from each well for the analysis of field parameters. SAIC documented the temperature, pH, conductivity, and turbidity of each sample using a Horiba U-10 water quality instrument.

   Each groundwater sample was submitted for the analysis of target compound list (TCL) volatile organic compounds (VOCs) by United States Environmental Protection Agency (EPA) Method 8260B. Additionally, groundwater from 6 of the 47 wells (MW-2, MW-51S, MW-91, MW-92, MW-93S, and MW-93D) was analyzed for available (Method MCAWW 1677) and total cyanide (Method 9012A) concentrations. A total of 23 of the 47 key well locations were sampled for concentrations of these dissolved metals: total chromium (inclusive of Cr^{+3} and Cr^{+6} ions), nickel, lead, and zinc using Method 6010B and for hexavalent chromium (only Cr^{+6} ion) using Method 7196A.

4.0 KEY WELL SAMPLING RESULTS

A summary of the analytical results from the June 2007 Key Well Sampling is presented on Table 4. Graduated symbol posting maps for the total VOCs, trichloroethene (TCE), tetrachloroethene (PCE), dissolved chromium (Cr^{+3} and Cr^{+6}), and hexavalent chromium are presented as Figures 4 through 8. Copies of laboratory reports associated with this sampling are available for review at SAIC's Harrisburg office.

4.1 NPBA Groundwater Chemistry

Three key monitoring wells (MW-10, MW-12, and RW-2) were sampled at the NPBA in June 2007. The dominant VOC found in groundwater beneath the NPBA is TCE. This is consistent with historical data trends for this area. The results of laboratory analyses for these monitoring wells are summarized on Table 4.

Historical concentrations of TCE in the three NPBA key wells are shown on Figure 9. A review of historical TCE concentrations indicates a generally decreasing concentration trend for the two on-site monitoring wells (MW-10 and MW-12). The TCE concentration in the off-site monitoring well (former residential well RW-2) has remained low and relatively stable during the past 10 years. Prior to bringing the NPBA groundwater extraction system on-line in 1994, concentrations of TCE ranged from 544 to 2,090 μg/l in RW-2. With the exception of one sampling event since 1998 (in 2002), TCE concentrations have been below 5 μg/l in RW-2. A review of historical analytical data for monitoring location RW-2 demonstrates effective capture of groundwater by the NPBA collection wells based on the overall reduction of VOCs at this location.

Metals were analyzed at one well (MW-12) sampled in the NPBA. No metals were detected above the laboratory reporting limits. Concentrations of total and free cyanide were not analyzed in the three samples from the NPBA. Overall, the 2007 analytical results for the three NPBA key wells are consistent with previous results.

4.2 Trichloroethane (TCA) Tank Area Groundwater Chemistry

Six monitoring wells (MW-32S, MW-32D, MW-34S, MW-34D, MW-35D, and MW-54) were sampled at the TCA Tank Area during June 2007. The TCA Tank Area is the site of a past TCA spill which occurred prior to the initial sampling performed in 1989. The TCA release resulted in elevated concentrations of TCA (up to 100,000 micrograms per liter [µg/L] at MW-32D in 1990) in the groundwater of this area. Groundwater extraction and treatment initiated at CW-8 in 1991 resulted in a rapid decrease in TCA concentrations near the release, with adjacent monitoring wells exhibiting slow declines.

Historical concentrations of TCE in the six TCA Tank Area wells are displayed graphically on Figure 10. A review of historical TCE concentrations indicates a generally decreasing concentration trend for five of the six wells (excluding MW-35D). The TCE concentration at MW-35D has remained relatively low but has fluctuated during the historical sampling events. In 2007, TCE concentrations ranged from 16 µg/L (at MW-34S) to 410 µg/L (at MW-54).

Dissolved metals concentrations were analyzed at five locations (excluding MW-35D) near the TCA area in 2007. The only dissolved metal with a positive detection above the laboratory reporting limit was chromium. Monitoring well MW-32S displayed a concentration of 0.0108 milligrams per liter (mg/L) for total chromium and a concentration of 0.013 mg/L for hexavalent chromium. These detections do not exceed the EPA's maximum contaminant level (MCL) for chromium in drinking water, which is 0.1 mg/L.

Historical groundwater sampling data for the TCA Tank Area indicate that TCA concentrations have generally decreased in monitoring and extraction wells since remediation began in 1991. Data from the TCA Tank Area indicate that TCE is now the dominant VOC present in this area.

4.3 WPL Groundwater Chemistry

Nineteen WPL monitoring wells were sampled as part of this key well sampling event (MW-5, MW-6, MW-7, MW-37S, MW-37D, MW-38D, MW-39S, MW-39D, MW-47, MW-50S, MW-50D, MW-51S, MW-51D, MW-74S, MW-74D, MW-75S, MW-75D, MW-93S, and MW-93D). The results of laboratory analyses for the monitoring wells are summarized on Table 4.

The dominant VOCs detected in the WPL monitoring wells are TCE (at MW-7, MW-38D, MW-39S, MW39D, MW-47, MW-50S, MW-50D, MW-51S, MW-51D, MW-74S, MW-74D, MW-75D, and MW-93D) and PCE (at MW-37S, MW-37D, and MW-75S). Historically, PCE is more prevalent in the southwest corner of the WPL while TCE is more prevalent throughout the remainder of the WPL. Concentrations of the most prevalent VOC in this area (TCE) are graphed for the WPL key wells on Figures 11A, 11B and 12. Additionally, concentrations of PCE in the southern WPL area monitoring wells are graphed on Figure 13. Most of the WPL monitoring wells exhibit a relatively flat or gradual decreasing TCE concentration trend. The exception to this statement is at well MW-50D, where the TCE concentrations have increased since sampling began, and at MW-75D, where the PCE and TCE concentrations spiked between 2004 and 2006 but have returned to typical levels in 2007.

The following noteworthy observations for the WPL sampling locations were identified during the June 2007 sampling event:

- Concentrations of TCE and PCE detected at the MW-75S and MW-75D well cluster represent two of the three highest detections at the site (MW-50D is the other). Since the initial sampling event at these locations (September 1999), TCE and PCE concentrations at MW-75S have remained relatively consistent at the 5 to 30 parts per million (ppm) range (refer to Figures 12 and 13). During this same time period, TCE and PCE concentrations at MW-75D showed an increasing trend until 2006. Concentrations of TCE and PCE at MW-75D have decreased over the past year by at least 73 percent.

- Based on a review of the June 2007 analytical data for well MW-75D, TCE is the most prevalent VOC at this location. Historically (until 2006), PCE had comprised approximately 60 to 70 percent of the total VOC concentration. During the June 2007 event, PCE concentrations represented only 22 percent of the total (1,300 μg/L of 5,940 μg/L), while TCE concentrations represented 64 percent of the total VOC detection (3,800 μg/L of 5,940 μg/L).

- Well MW-50D represents a second area of concentrated VOCs at the site. TCE is the most prevalent VOC at this location. Following installation of this well in 1991, TCE was detected at a concentration of 1,900 μg/L. TCE was detected at similar levels in 2000 (1,450 μg/L), but this well was not sampled again until June 2004. The June 2004 sampling event displayed a significant increase in TCE in the deep groundwater at the MW-50D sampling location (to 18,000 μg/L). Concentrations of TCE in the shallow groundwater at this monitoring location (at MW-50S) did not show similar magnitude changes (250 μg/L in 2000 to 520 μg/L in 2004). This information suggests that a plume of high concentration VOCs has been drawn from the North Building 4 area (the closest known source area), through the deeper portion of the bedrock aquifer (MW-50D is screened from 160 to 170 feet below grade), and toward groundwater extraction well CW-17. The VOC plume does not appear to be impacting the shallower portion of the bedrock aquifer at MW-50S (screened from 110 to 120 feet below grade). The 2007 TCE detection at MW-50D (6,900 μg/L) indicates that the TCE concentrations have begun to decrease since the maximum historical detection was reported (18,000 μg/L) in June 2004.

- The three highest site-wide detections (above laboratory reporting limits) for dissolved chromium were reported in northern WPL wells (MW-7, MW-47, and MW-32S). One other detection of dissolved chromium was reported for well MW-32S. Concentrations of dissolved chromium ranged from 0.0108 mg/L (MW-51S) to 3.58 mg/L (MW-47). The EPA's MCL for chromium in drinking water is 0.1 mg/L. Two of the four dissolved

chromium detections (at MW-51S and MW-47) contained chromium at concentrations (0.253 mg/L and 3.58 mg/L, respectively) above the MCL.

- The three highest site-wide detections of hexavalent chromium were reported for the same northern WPL wells (MW-7, MW-47, and MW-51S). One other detection of hexavalent chromium was reported for well MW-32S. The hexavalent chromium concentrations varied between 0.013 mg/L (MW-32S) and 3.0 mg/L (MW-47). The EPA does not currently have a drinking water MCL for hexavalent chromium, except as total chromium (0.1 mg/L).

4.4 SPBA Groundwater Chemistry

Six key monitoring wells (MW-40S, MW-40D, MW-43S, MW-43D, MW-64S, and MW-64D) were sampled in June 2007 near the SPBA. The dominant VOC detected in groundwater beneath this area is TCE. This is consistent with historical sampling data collected from this area. The detected analytical results are summarized on Table 4.

Concentrations of the most prevalent VOC in this area (TCE) are graphed and included as Figure 14. This illustration shows the relative concentrations of TCE since 1990 in the six regularly sampled key wells at the SPBA. The highest concentrations of TCE in this area continue to be observed at MW-64D (located in the southeast corner of the property). A review of concentration trends since 1990 indicates that TCE concentrations are decreasing at three locations (MW-43D, MW-64S, and MW-64D) where concentrations are highest. Sampling data for the remaining three wells (MW-40D, MW-40S, and MW-43S) indicate consistently low (or non-detectable) levels of TCE.

Two wells near the SPBA (MW-43S and MW-43D) were sampled for metals during 2007. No metals were detected above the laboratory reporting limit. The metals and VOC sampling results presented for the SPBA are consistent with those reported in 2006.

4.5 Eastern Property Boundary Area Groundwater Chemistry

Four key monitoring wells (MW-2, MW-17, MW-91, and MW-92) were sampled in June 2007 to monitor groundwater quality near Harley-Davidson's Eastern Property Boundary Area (EPBA). PCE is the dominant VOC detected in groundwater from wells MW-2, MW-91, and MW-92. TCE is the dominant VOC detected in groundwater sampled from the remaining well (MW-17). The analytical results are summarized on Table 4.

Historical concentrations of TCE and PCE are graphed and included as Figures 15 and 16, respectively. None of the EPBA wells were sampled for metals; however, groundwater from wells MW-2, MW-91, and MW-92 was sampled for total and available cyanide. A summary of the data trends observed for the eastern area is presented below:

- MW-2 is located next to a former cyanide disposal area near the eastern site property boundary. PCE and TCE were the only VOCs detected at this location in 2007, with PCE being the most dominant VOC. A review of Figures 15 and 16 indicates that both TCE and PCE concentrations exhibit a generally decreasing trend since monitoring began in 1986.

- MW-17 is located in the east-central portion of the site, downgradient and west of the landfill. The only VOC detected in the June 2007 sample from this location was TCE (42 μg/L). TCE concentrations have exhibited a gradual decreasing concentration trend since it was initially detected at a maximum concentration of 254 μg/L in 1987.

- Both monitoring wells MW-91 and MW-92 were sampled for the eighth time in 2007. The 2007 total VOC concentrations reported for both wells (151 μg/L and 213 μg/L, respectively) are part of a generally decreasing concentration trend since sampling began in 2000.

- Groundwater from only one of the three samples in this area (MW-2) contained detectable concentrations of available cyanide (which is free cyanide, plus cyanide complexes that easily dissociate). The reported concentration of available cyanide in the MW-2 sample was 0.014 mg/L. The EPA does not currently have an MCL for allowable levels of available cyanide but does have an MCL value for free cyanide of 0.2 mg/L. The MW-2 available cyanide detection does not exceed the MCL value.

Data trends observed for the annual key well sampling locations at the EPBA generally indicate decreasing concentration trends.

4.6 Additional Site-Wide Groundwater Chemistry Data

Nine additional key monitoring wells not summarized above were sampled to monitor groundwater quality at or near the Harley-Davidson site. One well (MW-82) is located along the property line in the north-central portion of the facility, and one well (MW-85) is located along the property line in the south-central portion of the facility. Six of the remaining seven wells (MW-69, MW-79, MW-81S, MW-81D, MW-87, and MW-88) monitor groundwater beneath the central portion of the facility. The final sampling location (RW-5) monitors off-site groundwater quality south of the Harley-Davidson facility.

Noteworthy items from the sampling of these wells are summarized below:

- Off-site monitoring well RW-5 did not contain VOCs at levels above laboratory reporting limits. Historically, this well was sampled on a quarterly basis from August 1987 to July 1999. During this time, TCE concentrations had increased to a maximum concentration of 57 μg/L in June 1995. The off-site facility served by this well was connected to public water in January 1999, and quarterly sampling of this well was discontinued. Annual sampling of RW-5 was resumed in June 2006. Both samples collected since sampling resumed at this location have not indicated the presence of VOCs above laboratory reporting limits.

- Current and historical groundwater quality data were used to make a general evaluation as to whether anaerobic biological degradation may be occurring in groundwater sampled at the eight additional on-site monitoring locations. Parent/daughter compound ratios were compared to determine the probability that anaerobic reduction is occurring. The typical transformation pathway for chlorinated solvents is from PCE to TCE to cis-1,2-dichloroethene (cis-1,2-DCE) (and/or trans-1,2-DCE) to vinyl chloride. Four of the eight additional on-site monitoring wells (MW-69, MW-82, MW-85, and MW-87) show evidence of anaerobic reduction. In 1999, groundwater at each of these locations contained higher levels of TCE compared to cis-1,2-DCE. Recent sampling data for these locations indicate that cis-1,2-DCE concentrations are now greater than (or closer to) TCE concentrations. Additional data trends are presented below by well.

- Well MW-69 monitors deep groundwater quality between the former firing ranges and is located approximately 400 feet north of Building 3. TCE and cis-1,2-DCE are the only VOCs detected above laboratory reporting limits at this location in 2007. TCE was the predominant VOC at this location between 1999 (when sampling began) and 2004. However, data from each of the past three annual sampling events indicate that cis-1,2-DCE concentrations are now more dominant than TCE. The 2007 cis-1,2-DCE concentration (160 μg/L) is the highest reported for this location, while the 2007 TCE concentration is the lowest (25 μg/L).

- Well MW-82 monitors deep groundwater quality along the north-central property line just north of the contractors' parking area. The only parameter detected above laboratory reporting limits during the past three annual sampling events (dating back to June 2005) is cis-1,2-DCE. Concentrations of TCE had made up 43 to 49 percent of the total VOC concentrations detected at this location between 1999 and 2001. However, TCE has not been detected above laboratory reporting limits since 2004.

- Well MW-85 monitors deep groundwater quality along the south-central property line along Route 30. TCE and cis-1,2-DCE are the only VOCs detected above laboratory reporting limits at this location since 2002. TCE and cis-1,2-DCE were detected at similar concentrations at this location between 2000 (when sampling began) and 2004. However, data from each of the past three annual sampling events indicate that cis-1,2-DCE concentrations are now more dominant than TCE. The 2007 TCE concentration (16 μg/L) is the lowest reported for this location to date.

- Well MW-87 monitors groundwater quality in the overburden near the southeast corner of Building 2. Concentrations of cis-1,2-DCE and TCE make up the majority of the VOC detections at this location. Since sampling of this location began in 1999, TCE concentrations have generally decreased from 2,300 to 1,300 μg/L. During this same time period, concentrations of cis-1,2-DCE have remained relatively stable (in the 740 to 1,100 μg/L range). However, the ratio of cis-1,2-DCE to TCE is now higher (48 percent to 65 percent).

- Well MW-79 monitors groundwater quality in the overburden at a location downgradient of the former Building 2 drum storage area. The only parameters detected above laboratory reporting limits during the past three annual sampling events (dating back to June 2005) are 1,1-dichloroethane and cis-1,2-DCE. The total VOC concentrations at this sampling location have historically been low, ranging from 21.26 μg/L in 2000 to 38 μg/L in 1999.

- Well cluster MW-81S and MW-81D monitors the shallow and deep groundwater quality near the paint shop. Concentrations of cis-1,2-DCE and TCE make up all of the confirmed VOC detections in groundwater sampled from these wells. The total VOC concentrations in the shallow aquifer (4,100 μg/L) are approximately one order of magnitude greater than what is detected in the deep aquifer (387 μg/L). TCE has consistently been the dominant VOC detected at both locations since sampling began in 1999.

- Well MW-88 monitors deep groundwater quality along the southern end of Building 2. TCE and cis-1,2-DCE are the only VOCs detected above laboratory reporting limits at this location in 2007. Since sampling of this location began in 2000, TCE concentrations have shown a generally decreasing trend (going from 230 to 42 μg/L). The cis-1,2-DCE concentrations have generally remained steady during this time, ranging from 5.2 to 56 μg/L.

- Three of the additional on-site monitoring wells (MW-85, MW-87, and MW-88) were sampled for metals during June 2007. No metals were detected above the laboratory reporting limits at these locations.

4.7 Quality Assurance/Quality Control (QA/QC)

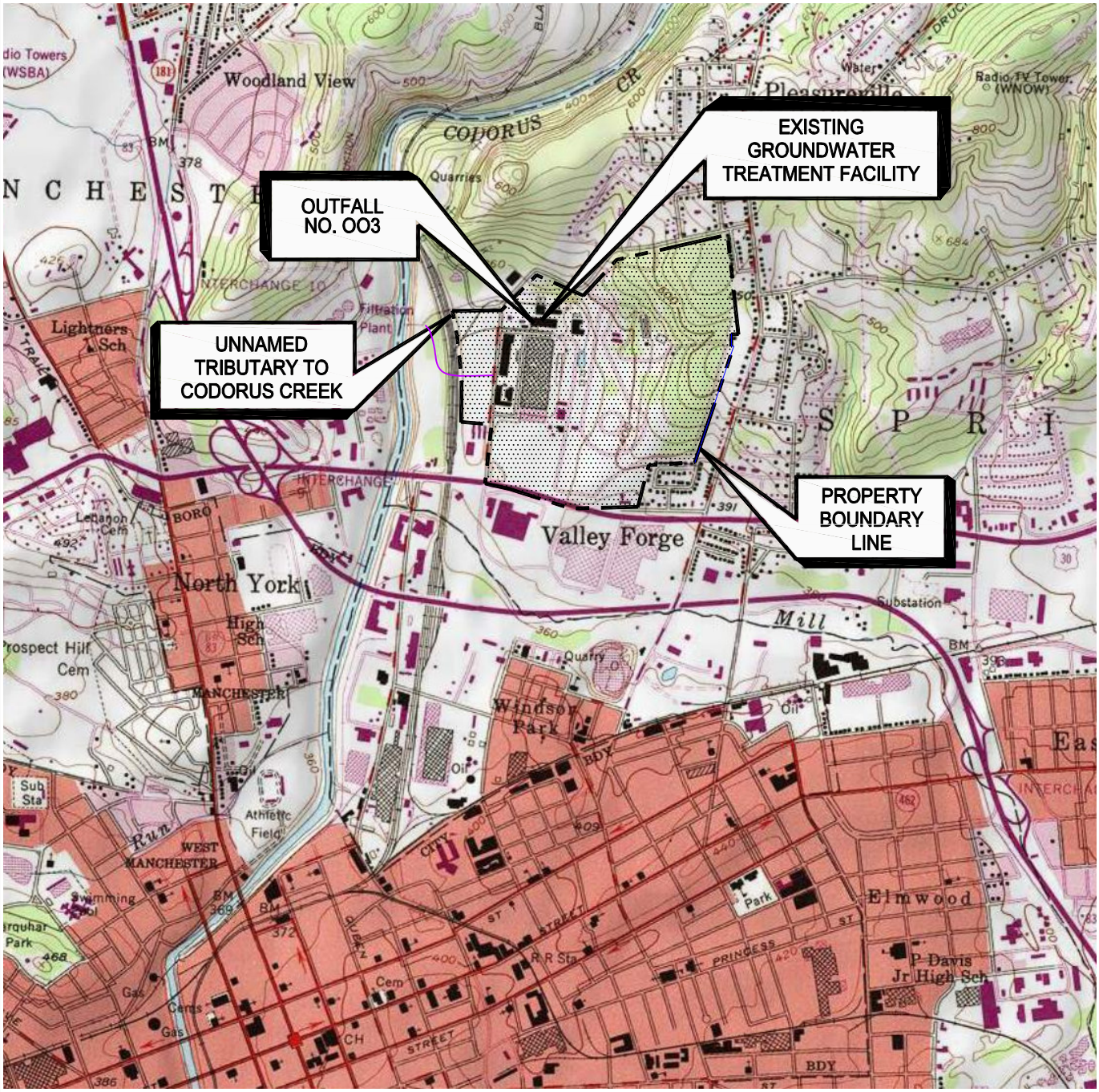
For quality control (QC) purposes, daily trip and five duplicate samples were collected and analyzed for TCL VOCs. Additionally, one duplicate sample was collected and analyzed for metals. Four of the five trip blank samples (excluding trip blank 3) did not contain detectable VOCs at a concentration above laboratory reporting limits. The trip blank 3 sample contained low concentrations of bromodichloromethane (5.5 μg/L) and chloroform (11 μg/L). Neither of these parameters was detected in any site sample at a concentration above the laboratory reporting limits. This situation suggests that the trip blank 3 detections are the result of laboratory contamination.

Sampling precision is measured using duplicate samples and calculating a relative percent difference (RPD) between each field duplicate sample and its original laboratory sample. As detailed on Table 3-2 in the site-specific Quality Assurance Project Plan (QAPP) (SAIC, April 2006), an acceptable RPD value for both metals and VOCs is less than 30 percent. A review of the metals RPD values for MW-87 indicates that these values range from 0 to 8.7 percent; therefore, they are acceptable.

The RPD values for the five VOC duplicate samples (collected at MW-10, MW-17, MW-51S, MW-74S, and MW-92) ranged from 0 to 35.9 percent. When these values are compared to the QAPP acceptable RPD of less than 30 percent, one value is determined to be slightly above the guidance value. For the MW-92 sample, the PCE detection was 160 µg/L, and its duplicate result was 230 µg/L (for an RPD of 35.9 percent). SAIC reviewed the field sampling procedure for this well and did not identify any issues that could have affected the PCE reproducibility. The MW-92 sample (and its duplicate) was collected on June 27, along with eight other samples (from MW-32S, MW-35D, MW-39S, MW-39D, MW-54, MW-69, MW-93S, and MW-93D). The analytical laboratory did not report any problems with analytical reproducibility for PCE in the June 27 sample batch. Therefore, SAIC has assigned the "J" qualifier to all detected PCE values reported for June 27 to indicate that they should be considered estimated values. This data should still be considered usable.

With the exception of the June 27 PCE results, no qualification of the results of this sampling is deemed necessary. All results are considered usable.

FIGURES



NOTE: BASE MAP FROM THE YORK PA., USGS 7 1/2 MIN TOPOGRAPHIC QUADRANGLE (PR 1990).

2000' 0 2000'

SCALE IN FEET

N

PENNSYLVANIA

QUADRANGLE LOCATION

HARLEY-DAVIDSON MOTOR COMPANY OPERATIONS, INC.
YORK VEHICLE OPERATIONS
1425 EDEN ROAD, YORK PA 17402

SITE LOCATION MAP

drawn RAM	checked SLM	approved SMS	figure no. 1
date 03/27/03	date 03/03/04	date 03/03/04	
job no. 01-1633-00-0822-100		file no. 0822-002.dwg	

SAIC Science Applications International Corporation
From Science to Solutions™

LEGEND

- MW 2 — KEY WELL LOCATION AND DESIGNATION
- CW 2 — EXTRACTION WELL LOCATION AND DESIGNATION
- RW-4 — MONITORING WELL LOCATION AND DESIGNATION
- S-6 — SURFACE WATER MONITORING LOCATION AND DESIGNATION

NORTHEAST PROPERTY BOUNDARY AREA (NPBA)

GROUNDWATER TREATMENT BUILDING

LIFT STATION

TCA TANK AREA

WEST PARKING LOT AREA (WPL)

DEEP GROUNDWATER COLLECTION TRENCH

TOE DRAIN

APPROX ELEV 386

APPROX ELEV 372

APPROX ELEV 376

N

400' 0 400'

SCALE IN FEET

HARLEY-DAVIDSON MOTOR COMPANY OPERATIONS, INC.

YORK VEHICLE OPERATIONS
1425 EDEN ROAD, YORK, PA 17402

KEY WELL LOCATION MAP

drawn RAM	checked SLM	approved SMS	figure no. 2
date 08/12/05	date 08/30/07	date 08/30/07	
job no. 01-1633-00-8342-900		file no. 5385-004.dwg	

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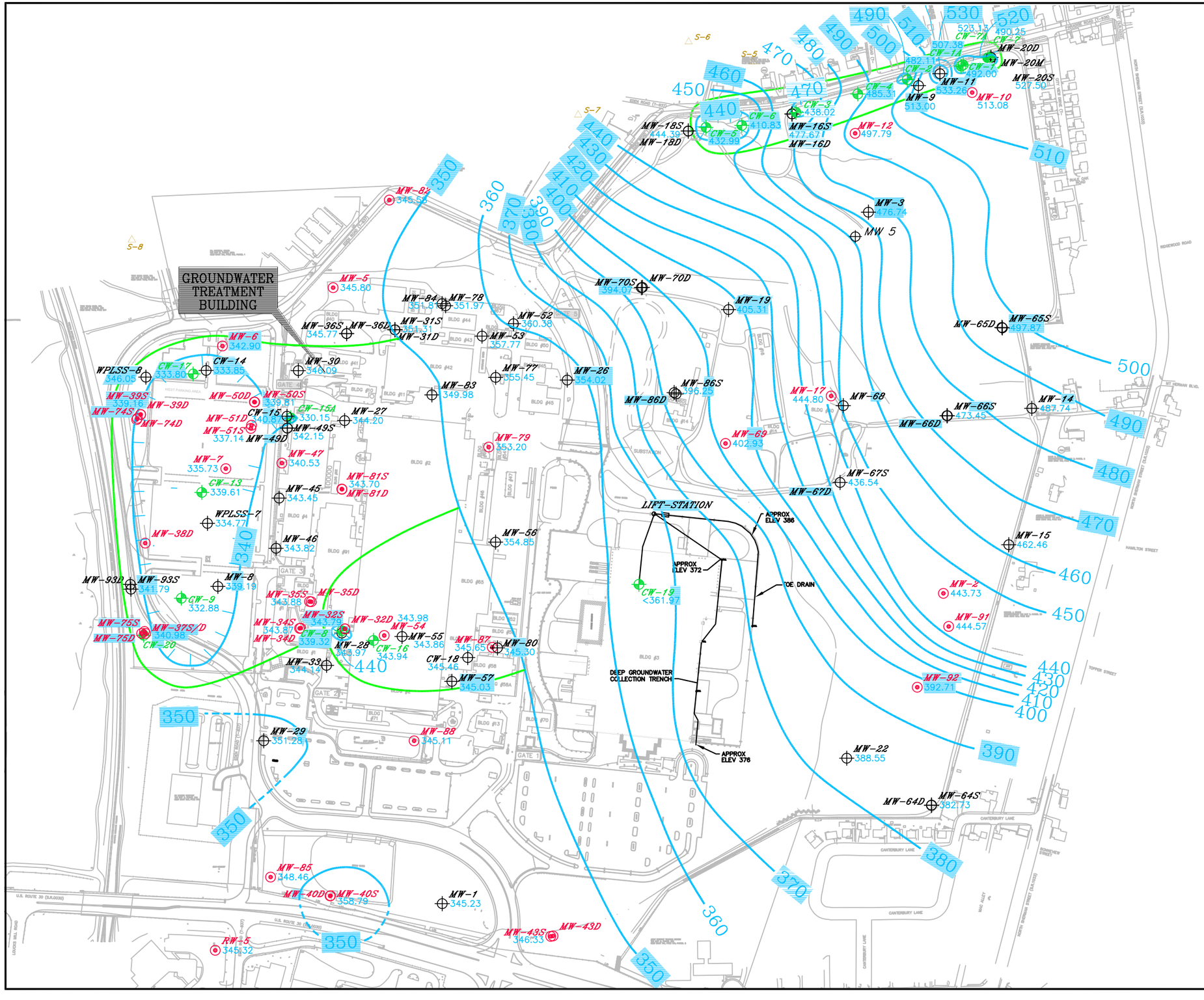

Well I.D.	Daily Flow (Gallons)	Average Daily Pumping Rate (GPM)
CW-1	3,669	2.5
CW-1A	217	0.2
CW-2	901	0.6
CW-3	4,474	3.1
CW-4	1,681	1.2
CW-5	2,215	1.5
CW-6	5,626	3.9
CW-7	568	0.4
CW-7A	1,187	0.8
CW-8	142,800	99.2
CW-9	119,631	83.1
CW-13	10	0.0
CW-14*	–	–
CW-15A	6,279	4.4
CW-16*	–	–
CW-17	135,578	94.2
CW-18*	–	–
CW-19	0	0
Lift Station	4,850	3.4

* INDICATES WELL IS OUT OF SERVICE

LEGEND

- MW 5 — MONITORING WELL LOCATION AND DESIGNATION
- MW 2 — KEY WELL LOCATION AND DESIGNATION
- CW-1 — EXTRACTION WELL LOCATION AND DESIGNATION
- APPROXIMATE WELL CAPTURE ZONE, JUNE 2007
- 492 — GROUNDWATER ELEVATION CONTOUR LINE, DASHED WHERE INFERRED (CONTOUR INTERVAL VARIES)
- 492.00 — GROUNDWATER ELEVATION (FT. AMSL)

POSTED WATER LEVELS AT WELL PAIRS ARE FOR THE SHALLOW (WATER TABLE) WELL POINT.

400' 0 400'

SCALE IN FEET

HARLEY-DAVIDSON MOTOR COMPANY OPERATIONS, INC.
YORK VEHICLE OPERATIONS
1425 EDEN ROAD, YORK, PA 17402

GROUNDWATER TABLE CONTOURS JUNE 20, 2007

drawn RAM	SLM	approved SMS	figure no. 3
date 07/20/07	08/30/07	date 08/30/07	
job no. 01-1633-00-8629-800		file no. 8629-002.dwg	

SAIC® From Science to Solutions

RW-2
ND

MW-10
390

MW-12
151

MW-82
9.8

MW-5
ND

MW-6
ND

MW-39S
125

MW-74S
90

MW-50D
14,870

MW-50S
1,141

MW-74D
152.7

MW-39D
407

MW-51S
3,542

MW-51D
307

MW-47
253.9

MW-7
2,396

MW-81D
387

MW-81S
4,100

MW-38D
33

MW-93D
430

MW-93S
ND

MW-75S
34,500

MW-75D
5,940

MW-37S
552

MW-37D
688

MW-34D
132

MW-35D
204

MW-32S
380

MW-34S
23.2

MW-32D
204.8

MW-54
720

MW-88
59

MW-79
31.8

MW-87
2,150

MW-69
192.5

MW-17
42

MW-2
111

MW-91
151

MW-92
213

MW-64D
960

MW-64S
350

MW-85
146

MW-40D
ND

MW-40S
ND

RW-5
ND

MW-43D
241

MW-43S
ND

MW-3
MW-70D
MW-70S
MW-19
MW-65D
MW-65S
MW-78
MW-84
MW-31S
MW-31D
MW-36D
MW-36S
MW-52
MW-85S
MW-77
MW-26
MW-83
MW-86D
MW-86S
MW-66D
MW-66S
MW-14
MW-68
CW-14
CW-17
MW-30
CW-15
MW-49D
MW-49S
CW-15A
MW-27
CW-13
MW-45
MW-46
MW-8
CW-9
MW-35S
CW-8
MW-38
CW-16
MW-55
MW-89D
CW-18
MW-57
MW-33
MW-29
MW-56
MW-1
CW-19
MW-22
MW-67D
MW-67S
MW-15
CW-7
CW-7A
CW-1A
MW-20S
MW-20D
MW-20M
CW-1
CW-2
MW-11
CW-4
MW-9
MW-16S
CW-3
MW-18D
CW-5
CW-6
MW-16D
MW-18S

Legend

- Railroad
- Codorus Creek
- Buildings
- Wells Not Sampled

Total VOCs in µg/l

- ≤ 5
- 5.1 to ≤ 50
- 50.1 to ≤ 500
- 500.1 to ≤ 5000
- > 5000.1

NOTE:
1. Results from June 2007
2. ND = Not detected
3. Concentration in ug/L.

0 200 400 800

1 inch equals 400 feet

Figure 4

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road York, PA 17402

Key Well Chemistry Map Total VOCs

Drawn: AGM 08/06/07
Checked:
Revisions:

SAIC
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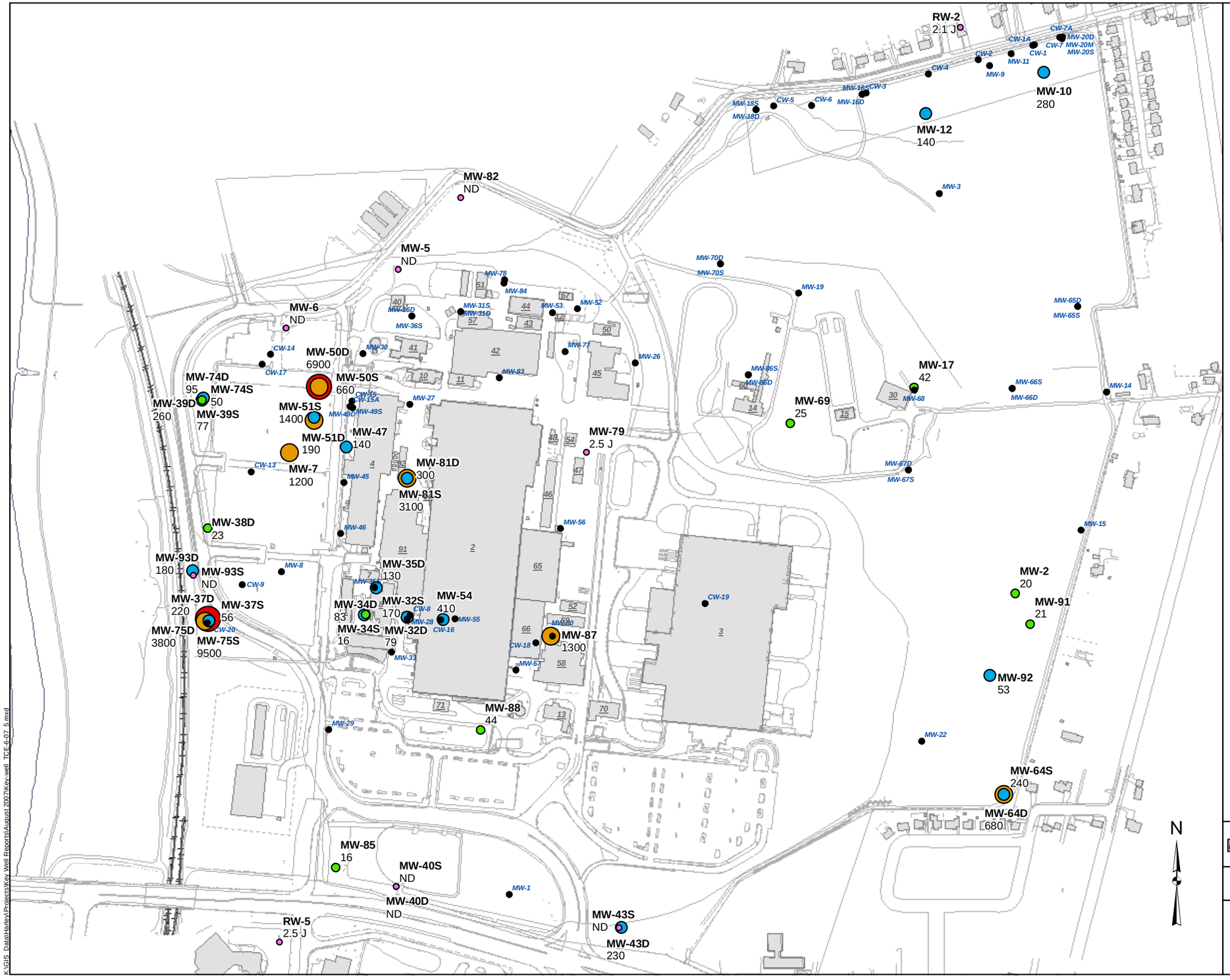
K:\GIS_Data\Harley\Projects\Key Well Reports\August 2007\Keywell_VOC-6-07_3-42.mxd



Legend

- Railroad
- Codorus Creek
- Buildings
- Wells Not Sampled

TCE in µg/l

- ≤ 5
- 5.1 to < 50
- 50.1 to < 500
- 500.1 to < 5000
- > 5000.1

NOTE:
1. Results from June 2007
2. J = Estimated result.
3. ND = Not detected
4. Concentration in ug/L.

0 200 400 800

1 inch equals 400 feet

Figure 5

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road York, PA 17402

Key Well Chemistry Map Trichloroethene - TCE

Drawn: AGM 08/06/07 | Checked:

Revisions:

SAIC From Science to Solutions

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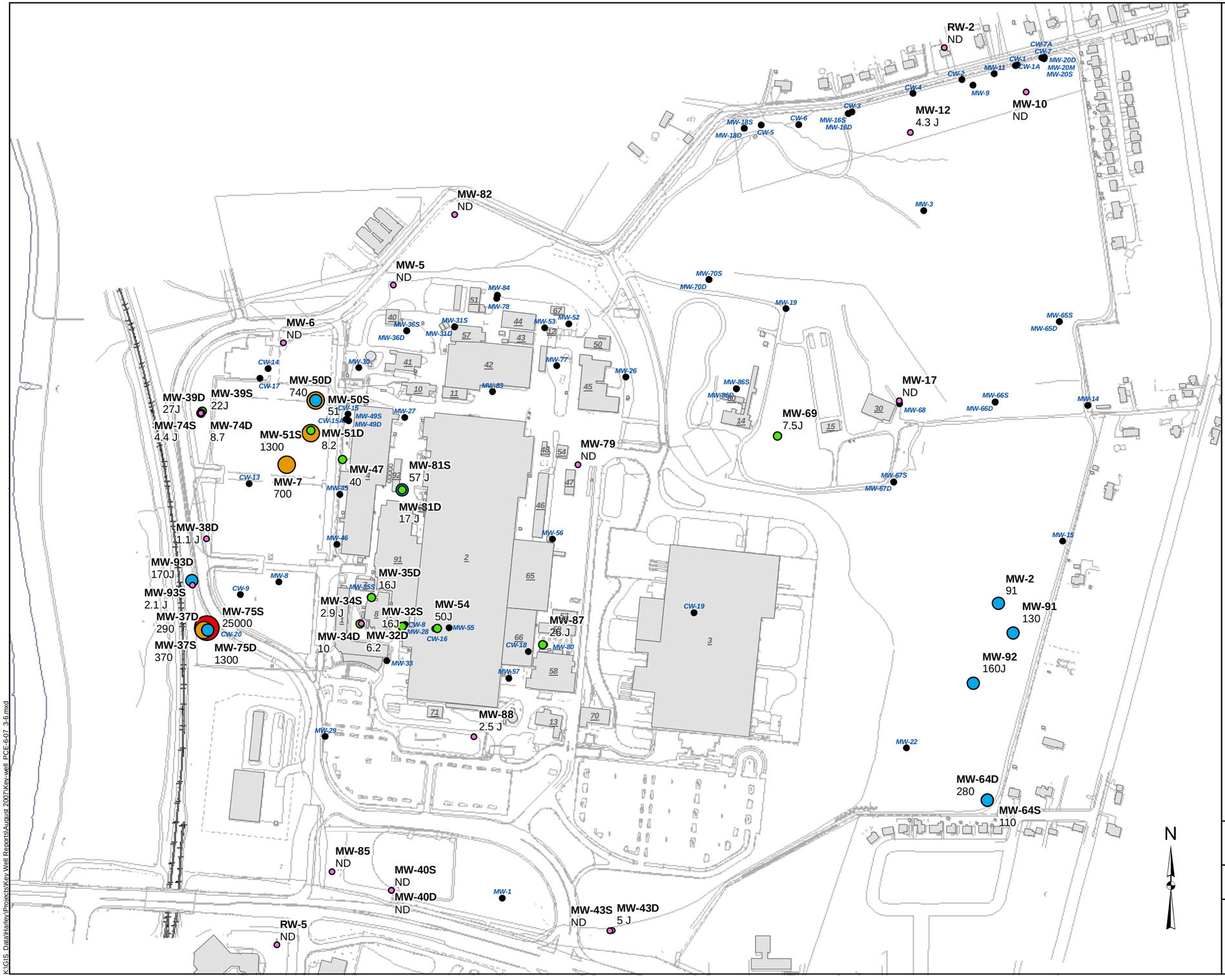


Legend

- Railroad
- Codorus Creek
- Buildings
- Wells Not Sampled

PCE in µg/l

- ≤ 5
- 5.1 to < 50
- 50.1 to < 500
- 500.1 to < 5000
- > 5000.1

NOTE:
1. Results from June 2007
2, J = Estimated result.
3. ND = Not detected
4. Concentration in ug/L.

0 200 400 800

1 inch equals 400 feet

Figure 6

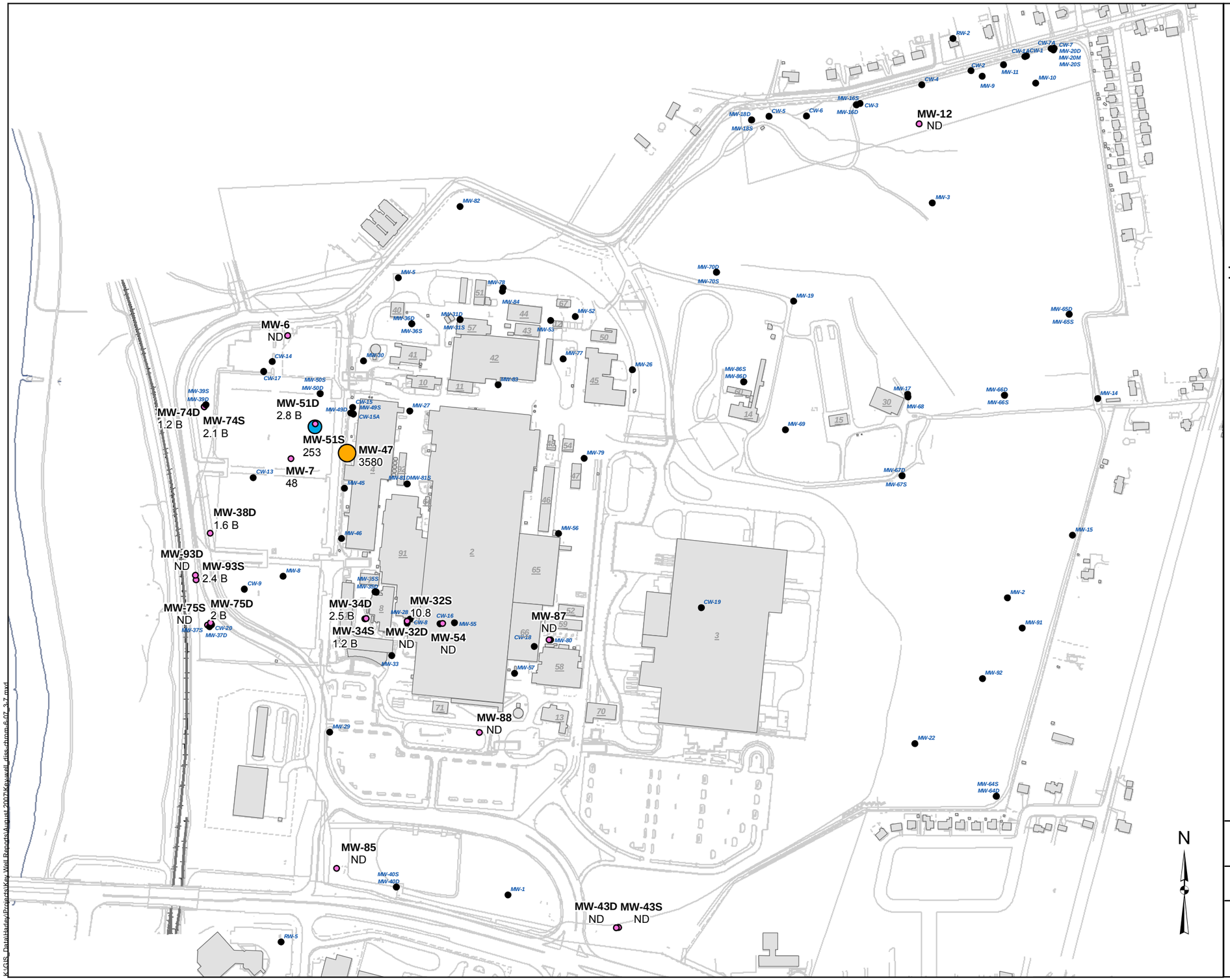
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road York, PA 17402

Key Well Chemistry Map Tetrachloroethene - PCE

SAIC From Science to Solutions

Drawn: AGM 08/06/07
Checked:
Revisions:

K:\GIS Data\Harley\Projects\Kev Well Reports\August 2007\Kev-well PCE-6-07 3-6.mxd



Legend

- Railroad
- Codorus Creek
- Buildings
- Wells Not Sampled

Total Chromium (Cr+3 and Cr+6, dissolved) in µg/l

- ≤ 50
- 50.1 to ≤ 100
- 100.1 to ≤ 1,000
- > 1000.1

NOTE:
1. *Results from June 2007*
2. *B = Estimated result.*
3. *J = Compound was detected in the method blank.*
4. *ND = Not detected*
5. *Concentration in ug/L.*

0 200 400 800

1 inch equals 400 feet

Figure 7

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road York, PA 17402

Key Well Chemistry Map –
Total Chromium (Cr^{+3} and Cr^{+6}, dissolved phase) in µg/l

Drawn: AGM 8/3/07 | Checked:

Revisions:

SAIC From Science to Solutions

K:\GIS_Data\Survey\Projects\Key Well Reports\August 2007\Keywell_disc_chrom_6-07_3-7.mxd

MW-6
ND

MW-74D
ND

MW-74S
ND

MW-51D
ND

MW-51S
260

MW-7
45

MW-47
3000

MW-38D
ND

MW-93D
ND

MW-93S
ND

MW-75S

MW-75D
ND

MW-34D
ND

MW-32S
13

MW-54
ND

MW-34S
ND

MW-32D
ND

MW-87
ND

MW-88
ND

MW-85
ND

MW-43S
ND

MW-43D
ND

MW-12
ND

MW-82 MW-5 MW-78 MW-84 MW-36D MW-36S MW-31D MW-31S MW-53 MW-52 MW-30 CW-14 CW-17 MW-50S MW-50D CW-15A CW-15 MW-49D MW-49S MW-27 MW-83 MW-77 MW-26 MW-39D MW-39S CW-13 MW-45 MW-81D MW-81S MW-79 MW-46 MW-56 MW-35D MW-35S CW-9 MW-8 MW-37S MW-37D CW-20 MW-28 CW-8 CW-16 MW-55 MW-33 MW-57 MW-89 CW-18 MW-29 MW-40D MW-40S MW-1 RW-5 MW-70D MW-70S MW-19 MW-86S MW-86D MW-69 MW-17 MW-68 MW-67D MW-67S MW-3 RW-2 CW-7 CW-7A CW-1A CW-1 MW-20D MW-20M MW-20S CW-2 MW-9 MW-11 MW-10 CW-4 MW-16D MW-16S CW-3 MW-18D MW-18S CW-5 CW-6 CW-19 MW-2 MW-91 MW-92 MW-22 MW-64D MW-64S MW-65D MW-65S MW-66D MW-66S MW-14 MW-15

Legend

- Railroad
- Codorus Creek
- Buildings
- Wells Not Sampled

Hexavalent Chromium in µg/l

- ≤ 50
- 50.1 to ≤ 100
- 100.1 to ≤ 1,000
- > 1000.1

NOTE:
1. *Results from June 2007*
2. *B = Estimated result.*
3. *J = Compound was detected in the method blank.*
4. *ND = Not detected*
5. *Concentration in ug/L.*

0 200 400 800

1 inch equals 400 feet

Figure 8

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road York, PA 17402

Key Well Chemistry Map - Hexavalent Chromium (Cr^{6})

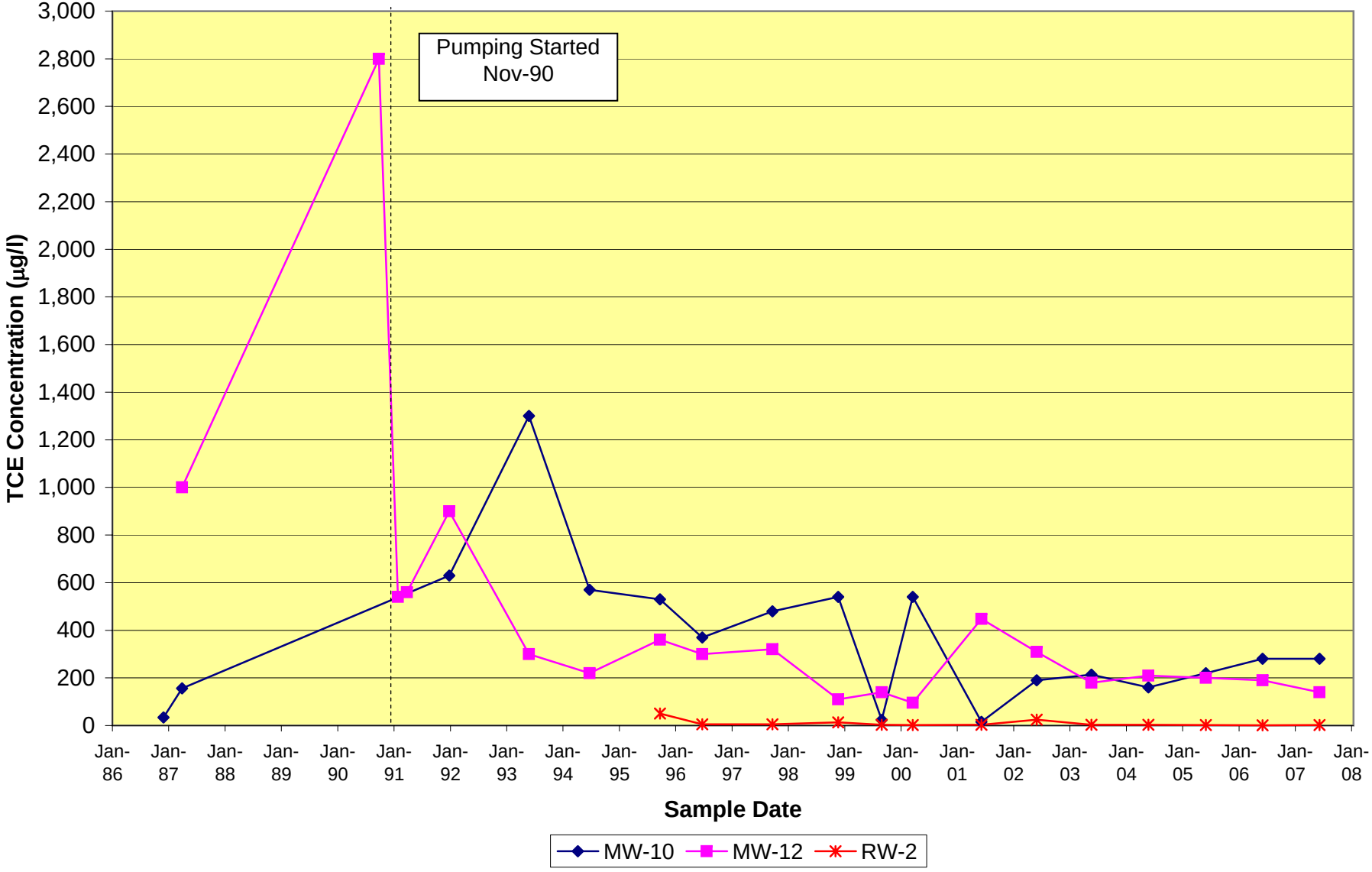
Drawn: AGM 08/06/07 | Checked:

Revisions:

SAIC From Science to Solutions

K:\GIS Data\Harley\Projects\Key Well Reports\August 2007\Key-well hex-chrom-6-07 3-8.mxd

Figure 9
TCE in NPBA Key Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402



H:\Jobs\Harley\Reporting\Key Well Sampling\2007\All Area Figures_Aug 07.xls

Figure 10
TCE in TCA Area Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

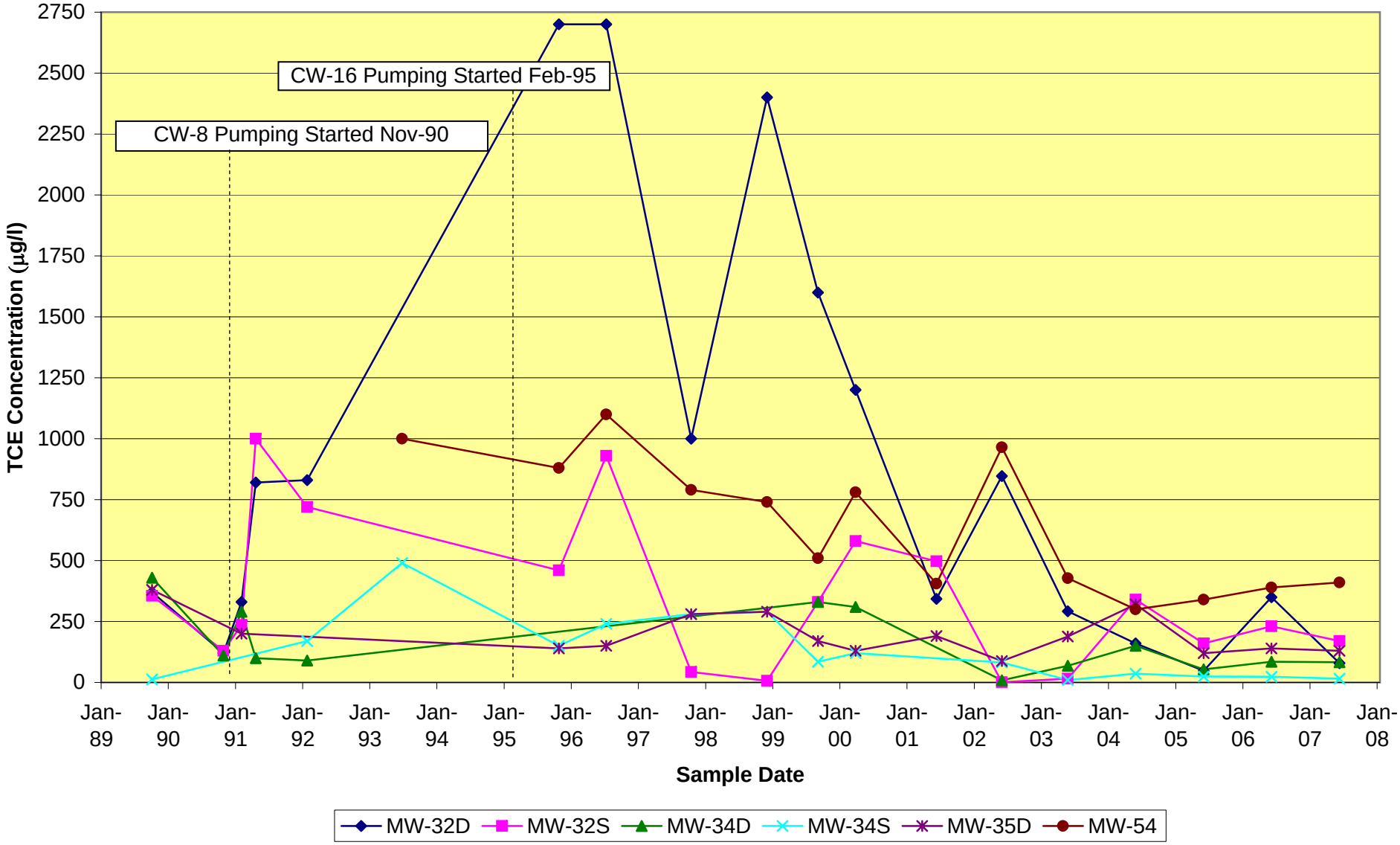


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Figure 11A
TCE in Northern WPL Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

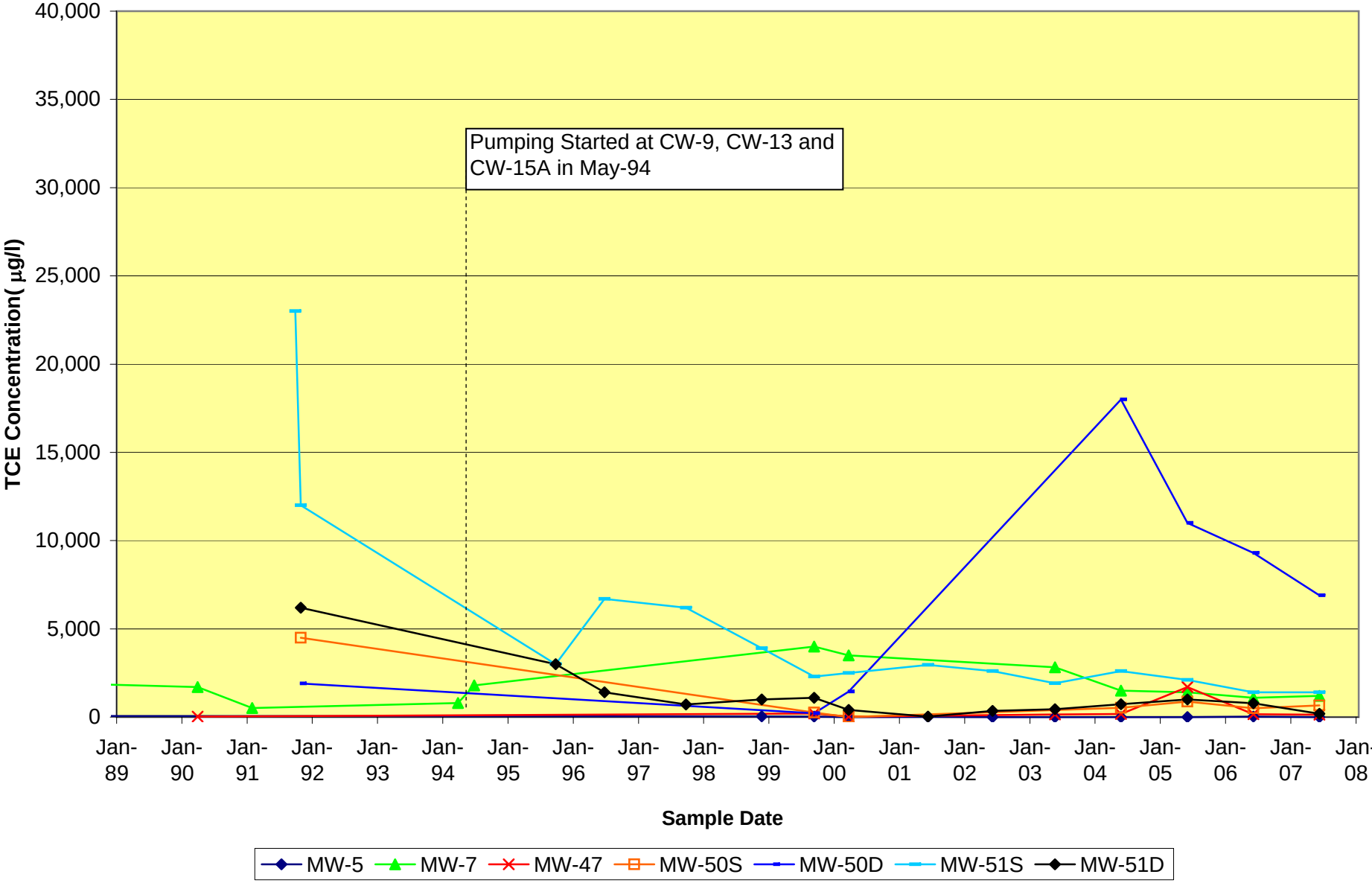

Figure 11B
TCE in Northern WPL Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

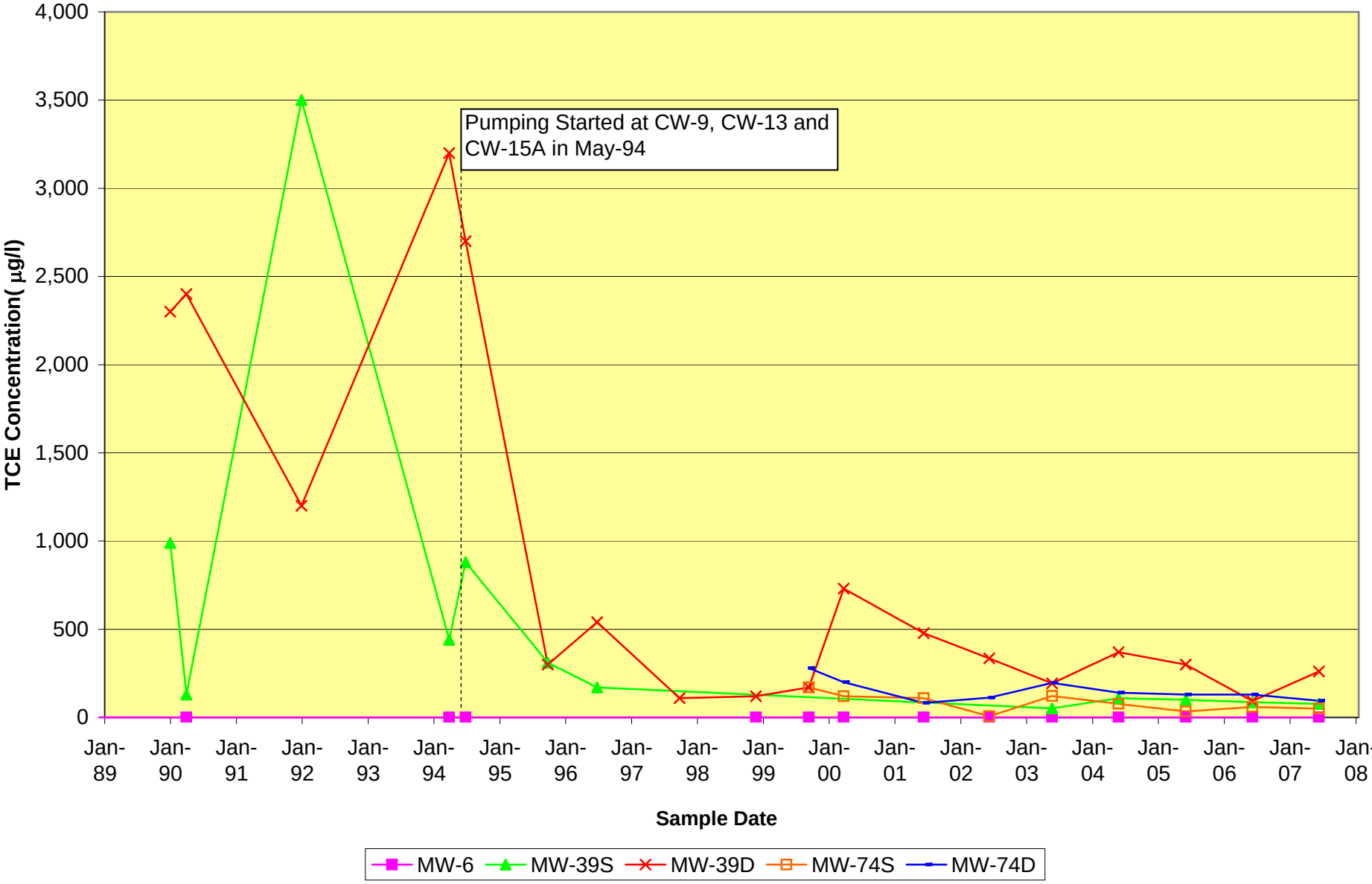

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Figure 12
TCE in Southern WPL Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

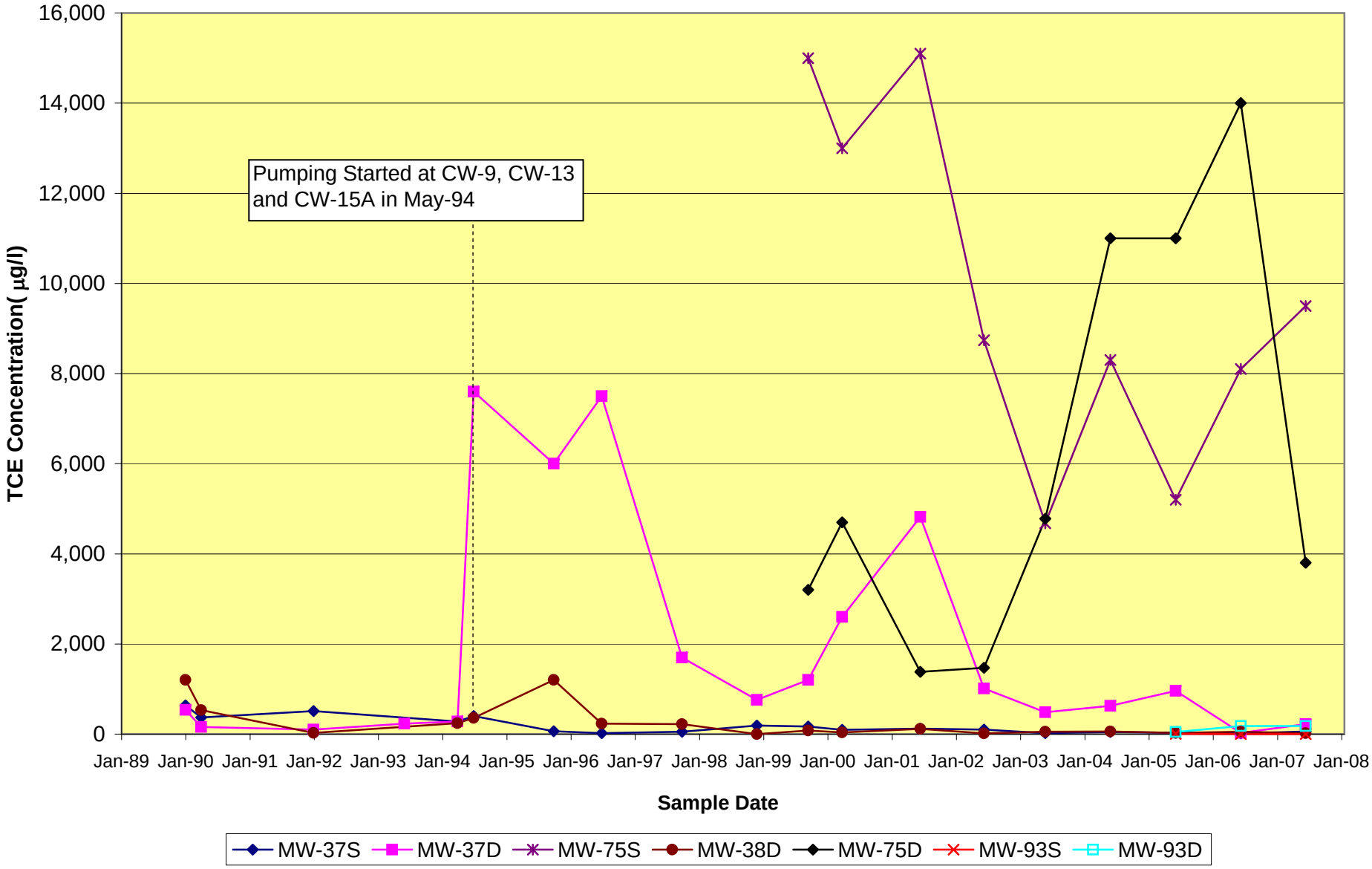

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Figure 13
PCE in Southern WPL Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

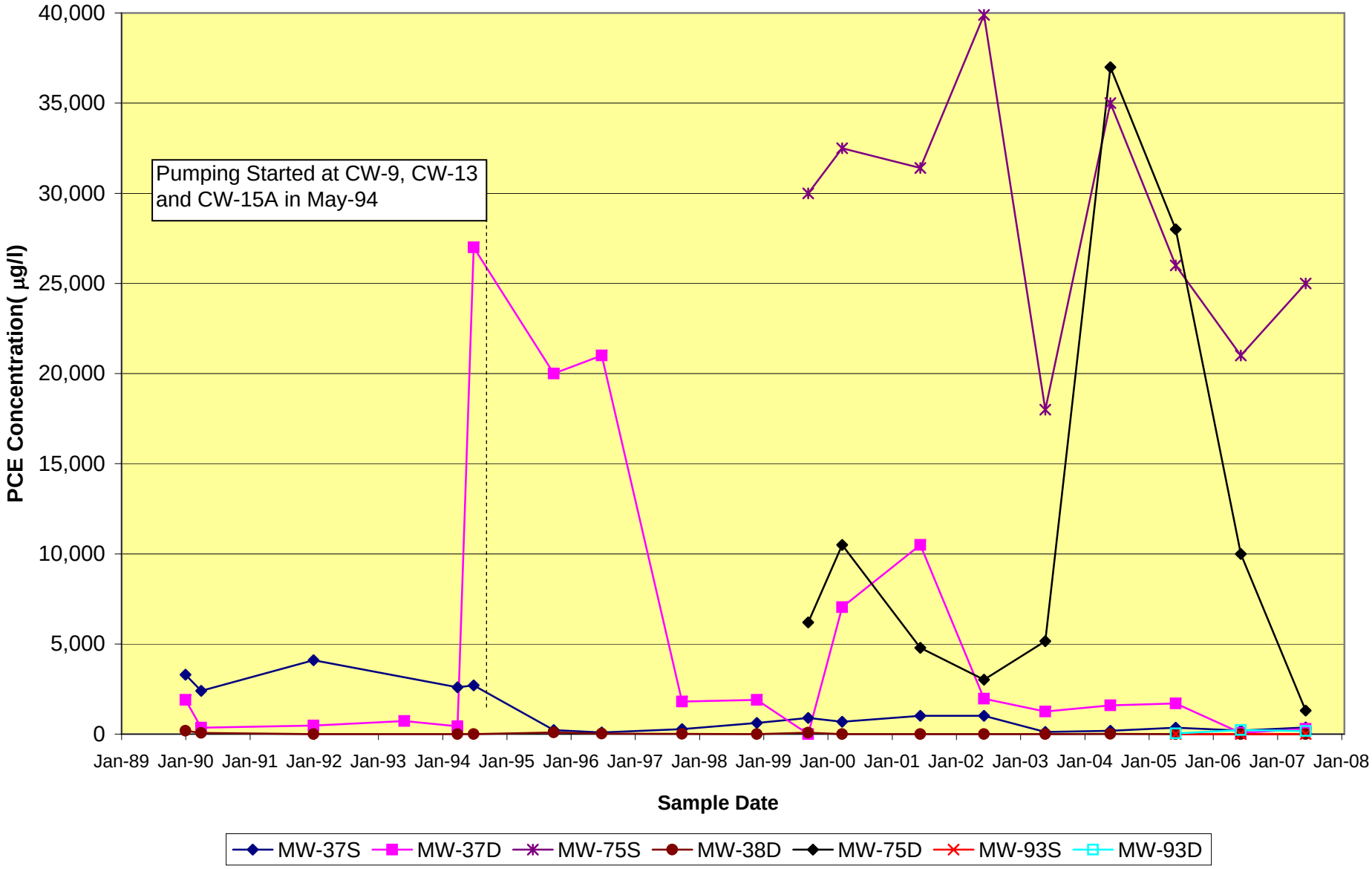
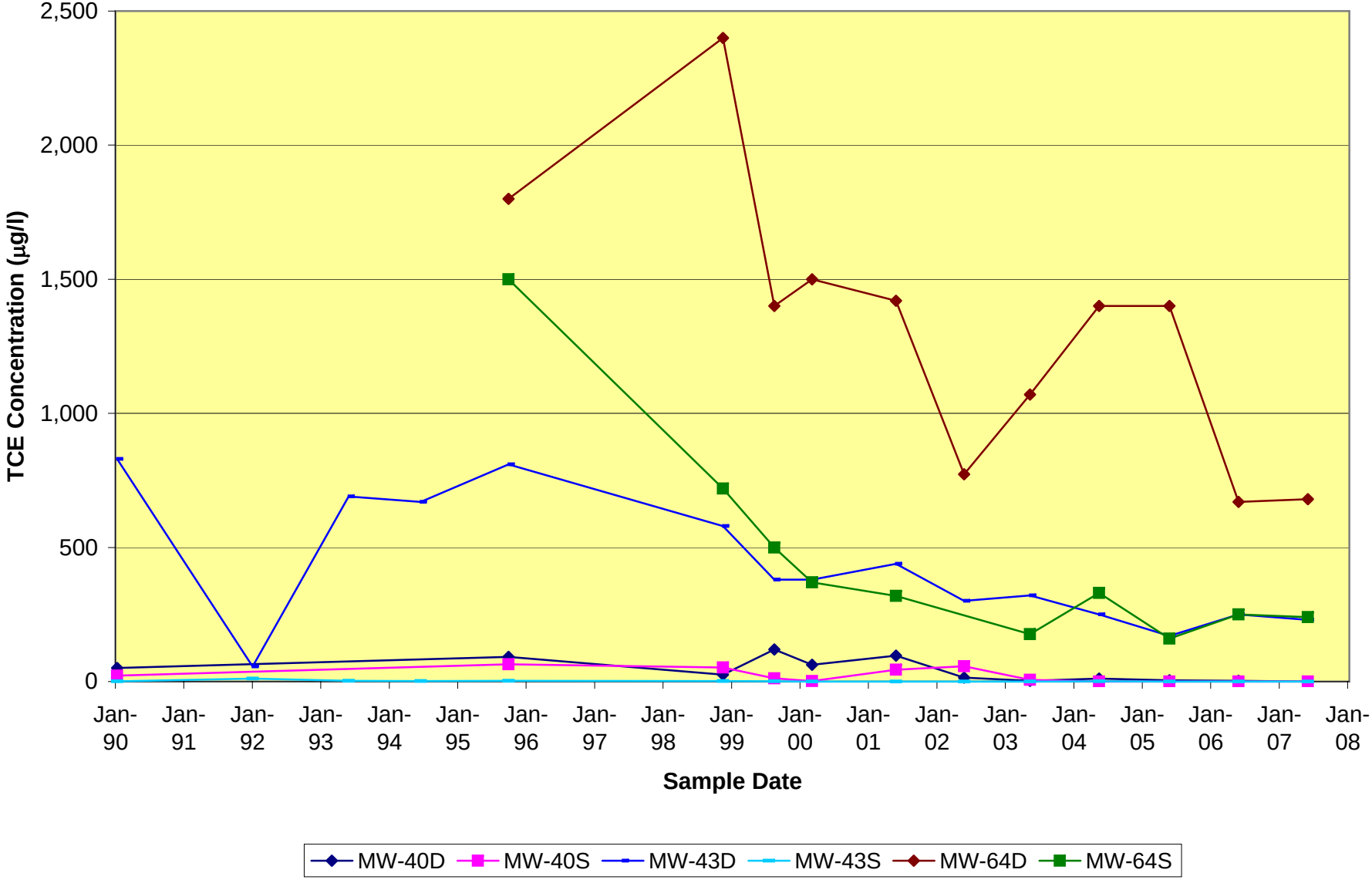


Figure 14
TCE in SPBA Monitoring Wells
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402



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TABLES

TABLE 1
SUMMARY OF MONITORING WELLS SAMPLED IN 2007
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

Well ID	Area*	Aquifer	Rationale	Notes
RW-2	Off-site/NPBA	Unknown	Off-site residential trend for VOC	Key well
RW-5	Off-site	Unknown	Off-site residential trend for VOC	Key well added in 2006
MW-2	CN	Deep Bedrock	Monitor CN area	Key well
MW-5	WPL	Deep Bedrock	Upgradient of WPL	Key well
MW-6	WPL	Shallow Bedrock	VOC trend for WPL	Key well
MW-7	WPL	Shallow Bedrock	Monitor GW downgradient of potential Cr source	Key well added in 2003
MW-10	NPBA	Deep Bedrock	VOC trend for NPBA	Key well
MW-12	NPBA	Deep Bedrock	VOC trend for NPBA	Key well
MW-17	Bunkers/LF	Shallow Bedrock	Monitor GW downgradient of landfill	Key well
MW-32D	TCA	Deep Bedrock	VOC trend for CW-8	Key well
MW-32S	TCA	Deep Bedrock	VOC trend for CW-8	Key well
MW-34D	TCA	Deep Bedrock	VOC trend for CW-8	Key well
MW-34S	TCA	Deep Bedrock	VOC trend for CW-8	Key well
MW-35D	TCA	Deep Bedrock	VOC trend for CW-8	Key well
MW-37D	WPL	Deep Bedrock	Monitor GW downgradient of WPL	Key well
MW-37S	WPL	Shallow Bedrock	Monitor GW downgradient of WPL	Key well
MW-38D	WPL	Deep Bedrock	Monitor GW downgradient of WPL	Key well
MW-39D	WPL	Deep Bedrock	Monitor GW downgradient of WPL	Key well
MW-39S	WPL	Shallow Bedrock	Monitor GW downgradient of WPL	Key well
MW-40D	SPBA	Deep Bedrock	Monitor GW along SPBA	Key well
MW-40S	SPBA	Shallow Bedrock	Monitor GW along SPBA	Key well
MW-43D	SPBA	Deep Bedrock	Monitor GW along SPBA	Key well
MW-43S	SPBA	Overburden	Monitor GW along SPBA	Key well
MW-47	WPL	Overburden	Monitor GW downgradient of potential Cr source	Key well added in 2003
MW-50D	WPL	Deep Bedrock	VOC trend for CW-15A	Key well added in 2004
MW-50S	WPL	Deep Bedrock	VOC trend for CW-15A	Key well added in 2004
MW-51D	WPL	Deep Bedrock	VOC trend for CW-15A	Key well
MW-51S	WPL	Shallow Bedrock	VOC trend for CW-15A	Key well
MW-54	TCA	Shallow Bedrock	VOC trend for CW-16	Key well
MW-64D	SPBA	Shallow Bedrock	VOC trend for SPBA	Key well
MW-64S	SPBA	Overburden	VOC trend for SPBA	Key well
MW-69	Bunkers	Deep Bedrock	Monitor GW downgradient of bunkers	Key well added in 2001
MW-74D	WPL	Deep Bedrock	Downgradient WPL	Key well added in 2001
MW-74S	WPL	Deep Bedrock	Downgradient WPL	Key well added in 2001
MW-75D	WPL	Deep Bedrock	SW Corner issue/Boundary	Key well added in 2001
MW-75S	WPL	Deep Bedrock	SW Corner issue/Boundary	Key well added in 2001
MW-79	Bldg 2 DS	Overburden	Monitor GW downgradient of former Bldg 2 drum storage	Access restored 2005
MW-81D	Paint Shop	Deep Bedrock	Potential source area	Key well added in 2001
MW-81S	Paint Shop	Shallow Bedrock	Potential source area	Key well added in 2001
MW-82	NP	Deep Bedrock	North Corner/Boundary	Key well added in 2001
MW-85	SP	Deep Bedrock	SW Corner/Boundary	Key well added in 2001
MW-87	SB2	Overburden	Near potential VOC source	Key well added in 2001
MW-88	SB2	Deep Bedrock	SE corner of Bldg 2	Key well added in 2001
MW-91	EPBA/CN	Deep Bedrock	Monitor CN area	Key well added in 2001
MW-92	EPBA/CN	Deep Bedrock	Monitor CN area	Key well added in 2001
MW-93S	WPL	Shallow Bedrock	SW Corner issue/Boundary	Key well added in 2005
MW-93D	WPL	Deep Bedrock	SW Corner issue/Boundary	Key well added in 2005

*** Area Legend**

B2S = Bldg. 2, South
Bldg 2 DS = Bldg. 2, Drum Storage
CN = Cyanide Spill area
EPBA = Eastern Property Boundary Area
LF = Landfill
NB4 East = North Bldg. 4, East
NP = North Plant
NPBA = North Property Boundary Area
NPDS = North Plant Drum Storage
NTTDS = North Test Track Drum Storage
OWCA = Old Waste Containment Area
SB2 = South Bldg. 2
SP = South Plant/Perimeter
SPBA = South Property Boundary Area
TT = Test Track
WPL = West Parking Lot

TABLE 2
SITE-WIDE GROUNDWATER LEVELS AND ELEVATION DATA
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

Well	2007 Reference Elevation (ft AMSL)	6/20/2007	
		Depth (feet)	Water Level (ft AMSL)
CW-1	570.07	78.07	492.00
CW-1A	568.28	60.90	507.38
CW-2	556.95	74.84	482.11
CW-3	518.66	80.64	438.02
CW-4	541.55	56.24	485.31
CW-5	470.34	37.35	432.99
CW-6	484.67	73.84	410.83
CW-7	573.78	83.53	490.25
CW-7A	573.91	50.78	523.13
CW-8	362.70	23.38	339.32
CW-9	356.82	23.94	332.88
CW-13	358.85	19.24	339.61
CW-14	358.92	25.07	333.85
CW-15	361.48	20.61	340.87
CW-15A	361.40	31.25	330.15
CW-16	364.60	20.66	343.94
CW-17	358.70	24.90	333.80
CW-18	364.72	19.26	345.46
CW-19	384.94	DRY @ 22.97	<361.97
CW-20	361.49	22.05	339.44
MW-1	380.73	35.50	345.23
MW-2	508.88	65.15	443.73
MW-3	541.10	64.36	476.74
MW-5	369.71	23.91	345.80
MW-6	359.62	16.72	342.90
MW-7	359.48	23.75	335.73
MW-8	358.09	18.90	339.19
MW-9	558.78	45.78	513.00
MW-10	567.80	54.72	513.08
MW-11	563.08	29.82	533.26
MW-12	535.93	38.14	497.79
MW-14	519.54	31.80	487.74
MW-15	524.09	61.63	462.46
MW-16S	516.60	38.93	477.67
MW-16D	516.51	4.62	511.89
MW-17	456.86	12.06	444.80
MW-18S	464.12	19.73	444.39
MW-18D	464.19	21.22	442.97
MW-19	427.36	22.05	405.31
MW-20S	574.05	46.55	527.50
MW-20M	574.19	45.77	528.42
MW-20D	573.85	47.03	526.82
MW-22	447.57	59.02	388.55
MW-26	376.46	22.44	354.02
MW-27	361.29	17.09	344.20
MW-28	362.91	18.94	343.97
MW-29	364.77	13.49	351.28
MW-30	362.26	16.17	346.09
MW-31S	369.28	17.97	351.31
MW-31D	369.30	18.06	351.24
MW-32S	362.44	18.65	343.79
MW-32D	362.57	19.60	342.97
MW-33	363.94	19.80	344.14
MW-34S	361.00	17.13	343.87
MW-34D	361.00	17.18	343.82

TABLE 2
SITE-WIDE GROUNDWATER LEVELS AND ELEVATION DATA
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

Well	2007 Reference Elevation (ft AMSL)	6/20/2007	
		Depth (feet)	Water Level (ft AMSL)
MW-35S	360.49	16.61	343.88
MW-35D	360.60	16.76	343.84
MW-36S	370.95	25.18	345.77
MW-36D	370.96	25.47	345.49
MW-37S	359.13	18.15	340.98
MW-37D	359.11	19.94	339.17
MW-38D	358.62	18.53	340.09
MW-39S	360.14	20.98	339.16
MW-39D	360.21	20.60	339.61
MW-40S	374.69	15.90	358.79
MW-40D	374.65	20.81	353.84
MW-43S	379.76	33.43	346.33
MW-43D	380.08	33.17	346.91
MW-45	359.91	16.46	343.45
MW-46	359.19	15.37	343.82
MW-47	360.57	20.04	340.53
MW-49S	361.45	19.30	342.15
MW-49D	361.44	18.62	342.82
MW-50S	360.40	20.59	339.81
MW-50D	360.41	21.23	339.18
MW-51S	360.19	23.05	337.14
MW-51D	360.43	21.72	338.71
MW-52	367.39	7.01	360.38
MW-53	367.15	9.38	357.77
MW-54	365.26	21.28	343.98
MW-55	365.22	21.36	343.86
MW-56	371.83	16.98	354.85
MW-57	364.54	19.51	345.03
MW-64S	416.34	33.61	382.73
MW-64D	416.43	60.26	356.17
MW-65S	546.82	48.95	497.87
MW-65D	546.80	47.89	498.91
MW-66S	506.73	33.28	473.45
MW-66D	506.92	33.39	473.53
MW-67S	446.26	9.72	436.54
MW-67D	446.26	artesian	artestian
MW-68	458.06	6.33	451.73
MW-69	411.90	8.97	402.93
MW-70S	413.20	19.13	394.07
MW-70D	413.26	19.16	394.10
MW-74S	359.85	19.68	340.17
MW-74D	359.79	19.18	340.61
MW-75S	359.03	19.25	339.78
MW-75D	359.85	20.63	339.22
MW-77	379.48	24.03	355.45
MW-78	367.08	15.11	351.97
MW-79	375.84	22.64	353.20
MW-80	370.29	24.99	345.30
MW-81S	360.12	16.42	343.70
MW-81D	359.89	16.24	343.65
MW-82	384.27	38.69	345.58
MW-83	363.69	13.71	349.98
MW-84	366.97	15.16	351.81

TABLE 2
SITE-WIDE GROUNDWATER LEVELS AND ELEVATION DATA
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

Well	2007 Reference Elevation (ft AMSL)	6/20/2007	
		Depth (feet)	Water Level (ft AMSL)
MW-85	371.54	23.08	348.46
MW-86S	406.50	10.25	396.25
MW-86D	406.56	8.65	397.91
MW-87	370.64	24.99	345.65
MW-88	367.93	22.82	345.11
MW-91	501.18	56.61	444.57
MW-92	476.87	84.16	392.71
MW-93S	360.76	18.97	341.79
MW-93D	360.14	18.89	341.25
RW-2	548.27	NM	NM
RW-5	375.54	30.22	345.32
WPL-SS-7	357.78	23.01	334.77
WPL-SS-8	364.40	18.35	346.05
Lift Station	392.60	26.13	366.47

NOTES:

-- : No data
N.M. : Not measured, due to access restrictions (i.e.,inside a residence)
Blue shading indicates active extraction well.
New top of casing elevations established for all wells in March 2007.

TABLE 3
HYDRAULIC GRADIENT DATA
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Road, York PA 17402

WELL ID	ELEV. TOC (FT. AMSL.)	SCREENED INTERVAL	MID-POINT SCREENED INTERVAL	MID-POINT ELEV (FT. AMSL.)	DIFFERENCE BETWEEN MID-POINTS	DEPTH TO WATER (FT.)	SWL ELEV FT. AMSL.	DIFFERENCE BETWEEN SWL ELEV	VERTICAL GRADIENT (FT/FT)
Northeast Property Boundary Area									
MW-16S	516.60	98-110	104.00	412.60	-91.59	38.93	477.67	-34.22	0.374
MW-16D	516.51	190-201	195.50	321.01		4.62	511.89		
MW-18S	464.12	45-65	55.00	409.12	-79.93	19.73	444.39	1.42	-0.018
MW-18D	464.19	130-140	135.00	329.19		21.22	442.97		
MW-20S	574.05	28-61	44.50	529.55	-114.70	46.55	527.50	0.68	-0.006
MW-20D	573.85	153-165	159.00	414.85		47.03	526.82		
Northern - West Parking Lot									
MW-39S	360.14	3-30	16.50	343.64	-59.93	20.98	339.16	-0.45	0.008
MW-39D	360.21	53-100	76.50	283.71		20.60	339.61		
MW-49S	361.45	135-155	145.00	216.45	-23.01	19.30	342.15	-0.67	0.029
MW-49D	361.44	158-178	168.00	193.44		18.62	342.82		
MW-50S	360.40	104-120	112.00	248.40	-51.49	20.59	339.81	0.63	-0.012
MW-50D	360.41	157-170	163.50	196.91		21.23	339.18		
MW-51S	360.19	29-51	40.00	320.19	-63.76	23.05	337.14	-1.57	0.025
MW-51D	360.43	88-120	104.00	256.43		21.72	338.71		
MW-74S	359.85	183-193	188.00	171.85	-49.56	19.68	340.17	-0.44	0.009
MW-74D	359.79	225-250	237.50	122.29		19.18	340.61		
Southern - West Parking Lot									
MW-37S	359.13	11-33	22.00	337.13	-111.02	18.15	340.98	1.81	-0.016
MW-37D	359.11	125-141	133.00	226.11		19.94	339.17		
MW-75S	359.03	168-173	170.50	188.53	-38.68	19.25	339.78	0.56	-0.014
MW-75D	359.85	205-215	210.00	149.85		20.63	339.22		
MW-93S	360.76	26.2-41.2	33.70	327.06	-106.62	18.97	341.79	0.54	-0.005
MW-93D	360.14	134.7-144.7	139.70	220.44		18.89	341.25		
Southeast Corner - Southern Property Boundary Area									
MW-64S	416.34	35-40	37.50	378.84	-34.91	33.61	382.73	26.56	-0.761
MW-64D	416.43	70-75	72.50	343.93		60.26	356.17		
Landfill Area - Eastern Property Boundary Area									
MW-65S	546.82	75-85	80.00	466.82	-17.32	48.95	497.87	-1.04	0.060
MW-65D	546.80	92.3-102.3	97.30	449.50		47.89	498.91		
MW-66S	506.73	50-60	55.00	451.73	-36.81	33.28	473.45	-0.08	0.002
MW-66D	506.92	84.5-99.5	92.00	414.92		33.39	473.53		
Approximate Spring Line - Near Sandstone Contact									
MW-43S	379.76	19-48	33.50	346.26	-51.68	33.43	346.33	-0.58	0.011
MW-43D	380.08	79-92	85.50	294.58		33.17	346.91		
MW-70S	413.20	18-33	25.50	387.70	-47.44	19.13	394.07	-0.03	0.001
MW-70D	413.26	68-78	73.00	340.26		19.16	394.10		
MW-86S	406.50	12-27	19.50	387.00	-55.44	10.25	396.25	-1.66	0.030
MW-86D	406.56	70-80	75.00	331.56		8.65	397.91		

Notes:
A negative vertical gradient value indicates a downward vertical gradient.
A positive vertical gradient value indicates an upward vertical gradient.
Depth to water data collected on June 20, 2007.
Top of casing (TOC) elevations re-established in March 2007.

TABLE 4
GROUNDWATER QUALITY ANALYSES SUMMARY
JUNE 2007 KEY WELL SAMPLING EVENT

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Rd, York PA 17402

Sample ID Sample Date Units	MW-2 6/28/2007 ug/L	MW-5 6/25/2007 ug/L	MW-6 6/25/2007 ug/L	MW-7 6/28/2007 ug/L	MW-10 Duplicate 6/26/2007 ug/L	MW-10 6/26/2007 ug/L	MW-12 6/28/2007 ug/L	MW-17 Duplicate 6/25/2007 ug/L	MW-17 6/25/2007 ug/L	MW-32D 6/29/2007 ug/L	MW-32S 6/27/2007 ug/L	MW-34D 6/26/2007 ug/L	MW-34S 6/26/2007 ug/L	MW-35D 6/27/2007 ug/L	MW-37D 6/29/2007 ug/L	MW-37S 6/29/2007 ug/L	MW-38D 6/26/2007 ug/L	MW-39D 6/27/2007 ug/L	MW-39S 6/27/2007 ug/L	MW-40D 6/25/2007 ug/L
Volatile Organic Compounds																				
1,1,1-Trichloroethane	0.79 U	0.79 U	0.79 U	96	1.6 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U	110	0.79 U	0.79 U	0.79 U	98	53	0.79 U	0.79 U	0.79 U	0.79 U
1,1,2,2-Tetrachloroethane	0.63 U	0.63 U	0.63 U	9.4 U	1.3 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U	1.3 U	0.63 U	0.63 U	0.63 U	1.3 U	1.3 U	0.63 U	0.63 U	0.63 U	0.63 U
1,1,2-Trichloroethane	0.79 U	0.79 U	0.79 U	12 U	1.6 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U	1.6 U	0.79 U	0.79 U	0.79 U	1.6 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U
1,1-Dichloroethane	1 U	1 U	1 U	15 U	2 U	2 U	1 U	1 U	1 U	4 J	16	1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	0.87 U	0.87 U	0.87 U	90	1.7 U	1.7 U	0.87 U	0.87 U	0.87 U	9.6	18	1.7 J	0.87 U	3.2 J	6.6 J	1.7 U	0.87 U	0.87 U	0.87 U	0.87 U
1,2-Dichloroethane	0.64 U	0.64 U	0.64 U	9.6 U	1.3 U	1.3 U	0.64 U	0.64 U	0.64 U	0.64 U	1.3 U	0.64 U	0.64 U	0.64 U	1.3 U	1.3 U	0.64 U	0.64 U	0.64 U	0.64 U
1,2-Dichloroethene (cis)	1 U	3.2 J	1 U	310	100	110	11	1 U	1 U	110	50	39	7.2	58	80	73	10	120	26	1 U
1,2-Dichloroethene (trans)	0.9 U	0.9 U	0.9 U	14 U	1.8 U	1.8 U	0.9 U	0.9 U	0.9 U	0.9 U	1.8 U	0.9 U	0.9 U	0.9 U	1.8 U	1.8 U	0.9 U	0.9 U	0.9 U	0.9 U
1,2-Dichloropropane	0.67 U	0.67 U	0.67 U	10 U	1.3 U	1.3 U	0.67 U	0.67 U	0.67 U	0.67 U	1.3 U	0.67 U	0.67 U	0.67 U	1.3 U	1.3 U	0.67 U	0.67 U	0.67 U	0.67 U
1,3-Dichloropropene (cis)	0.79 U	0.79 U	0.79 U	12 U	1.6 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U	1.6 U	0.79 U	0.79 U	0.79 U	1.6 U	1.6 U	0.79 U	0.79 U	0.79 U	0.79 U
1,3-Dichloropropene (trans)	0.57 U	0.57 U	0.57 U	8.5 U	1.1 U	1.1 U	0.57 U	0.57 U	0.57 U	0.57 U	1.1 U	0.57 U	0.57 U	0.57 U	1.1 U	1.1 U	0.57 U	0.57 U	0.57 U	0.57 U
1,4-Dioxane	170 U	170 U	170 U	2600 U	340 U	340 U	170 U	170 U	170 U	170 U	340 U	170 U	170 U	170 U	340 U	340 U	170 U	170 U	170 U	170 U
2-Chloroethylvinyl Ether	1.1 U	1.1 U	1.1 U	17 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
Acrolein	16 U	16 U	16 U	240 U	32 U	32 U	16 U	16 U	16 U	16 U	32 U	16 U	16 U	16 U	32 U	32 U	16 U	16 U	16 U	16 U
Acrylonitrile	8.1 U	8.1 U	8.1 U	120 U	16 U	16 U	8.1 U	8.1 U	8.1 U	8.1 U	16 U	8.1 U	8.1 U	8.1 U	16 U	16 U	8.1 U	8.1 U	8.1 U	8.1 U
Benzene	0.81 U	0.81 U	0.81 U	12 U	1.6 U	1.6 U	0.81 U	0.81 U	0.81 U	0.81 U	1.6 U	0.81 U	0.81 U	0.81 U	1.6 U	1.6 U	0.81 U	0.81 U	0.81 U	0.81 U
Bromoform	0.37 U	0.37 U	0.37 U	5.5 U	0.74 U	0.74 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U	0.37 U	0.37 U	0.37 U	0.74 U	0.74 U	0.37 U	0.37 U	0.37 U	0.37 U
Bromomethane	0.75 U	0.75 U	0.75 U	11 U	1.5 U	1.5 U	0.75 U	0.75 U	0.75 U	0.75 U	1.5 U	0.75 U	0.75 U	0.75 U	1.5 U	1.5 U	0.75 U	0.75 U	0.75 U	0.75 U
Carbon Tetrachloride	0.91 U	0.91 U	0.91 U	14 U	1.8 U	1.8 U	0.91 U	0.91 U	0.91 U	0.91 U	1.8 U	0.91 U	0.91 U	0.91 U	1.8 U	1.8 U	0.91 U	0.91 U	0.91 U	0.91 U
Chlorobenzene	0.71 U	0.71 U	0.71 U	11 U	1.4 U	1.4 U	0.71 U	0.71 U	0.71 U	0.71 U	1.4 U	0.71 U	0.71 U	0.71 U	1.4 U	1.4 U	0.71 U	0.71 U	0.71 U	0.71 U
Chlorodibromomethane	0.5 U	0.5 U	0.5 U	7.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.5 U	0.5 U	0.5 U	1 U	1 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	1.1 U	1.1 U	1.1 U	17 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U	2.2 U	1.1 U	1.1 U	1.1 U	2.2 U	2.2 U	1.1 U	1.1 U	1.1 U	1.1 U
Chloroform	0.78 U	0.78 U	0.78 U	12 U	1.6 U	1.6 U	0.78 U	1.1 J	1.1 J	0.78 U	1.6 U	0.78 U	2.5 J	2.3 J	1.8 J	1.6 U	0.78 U	0.78 U	0.78 U	0.78 U
Chloromethane	0.87 U	0.87 U	0.87 U	13 U	1.7 U	1.7 U	0.87 U	0.87 U	0.87 U	0.87 U	1.7 U	0.87 U	0.87 U	0.87 U	1.7 U	1.7 U	0.87 U	0.87 U	0.87 U	0.87 U
Dichlorobromomethane	0.58 U	0.58 U	0.58 U	8.7 U	1.2 U	1.2 U	0.58 U	0.58 U	0.58 U	0.58 U	1.2 U	0.58 U	0.58 U	0.58 U	1.2 U	1.2 U	0.58 U	0.58 U	0.58 U	0.58 U
Ethylbenzene	0.58 U	0.58 U	0.58 U	8.8 U	1.2 U	1.2 U	0.58 U	0.58 U	0.58 U	0.58 U	1.2 U	0.58 U	0.58 U	0.58 U	1.2 U	1.2 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl Ethyl Ketone	0.73 U	0.73 U	0.73 U	11 U	1.5 U	1.5 U	0.73 U	0.73 U	0.73 U	0.73 U	1.5 U	0.73 U	0.73 U	0.73 U	1.5 U	1.5 U	0.73 U	0.73 U	0.73 U	0.73 U
Methylene Chloride	0.75 U	0.75 U	0.75 U	11 U	1.5 U	1.5 U	0.75 U	0.75 U	0.75 U	0.75 U	1.5 U	0.75 U	0.75 U	0.75 U	1.5 U	1.5 U	0.75 U	0.75 U	0.75 U	0.75 U
Tetrachloroethene	91	0.57 U	0.57 U	700	1.1 U	1.1 U	4.3 J	0.57 U	0.57 U	6.2	16 J	10	2.9 J	16 J	290	370	1.1 J	27 J	22 J	0.57 U
Toluene	0.8 U	0.8 U	0.8 U	12 U	1.6 U	1.6 U	0.8 U	0.8 U	0.8 U	0.8 U	1.6 U	0.8 U	0.8 U	0.8 U	1.6 U	1.6 U	0.8 U	0.8 U	0.8 U	0.8 U
Trichloroethene	20	0.88 U	0.88 U	1200	280	280	140	42	42	79	170	83	16	130	220	56	23	260	77	0.88 U
Vinyl Chloride	0.94 U	0.94 U	0.94 U	14 U	1.9 U	1.9 U	0.94 U	0.94 U	0.94 U	3.5 J	1.9 U	0.94 U	0.94 U	0.94 U	1.9 U	1.9 U	0.94 U	0.94 U	0.94 U	0.94 U
Total VOCs	111	0	0	2396	380	390	151	42	42	204.8	380	132	23.2	204	688	552	33	407	125	0
Metals																				
Chromium - DISS	NR	NR	1.2 U	48	NR	NR	1.2 U	NR	NR	1.2 U	10.8	2.5 B	1.2 B	NR	NR	NR	1.6 B	NR	NR	NR
Hexavalent Chromium	NR	NR	2.6 U	45	NR	NR	2.6 U	NR	NR	2.6 U	13	2.6 U	2.6 U	NR	NR	NR	2.6 U	NR	NR	NR
Lead - DISS	NR	NR	2.4 U	2.4 U	NR	NR	2.4 U	NR	NR	2.4 U	2.4 U	2.4 U	2.4 U	NR	NR	NR	2.4 U	NR	NR	NR
Nickel - DISS	NR	NR	2.9 B	1.1 U	NR	NR	4.3 B	NR	NR	1.4 B	1.7 B	1.1 U	1.7 B	NR	NR	NR	1.5 B	NR	NR	NR
Zinc - DISS	NR	NR	7.8 B J*	6.8 B J*	NR	NR	6.2 B J*	NR	NR	4.2 B J*	8.8 B J*	6.7 B J*	7.5 B J*	NR	NR	NR	7.9 B J*	NR	NR	NR
Cyanide																				
Cyanide (Available)	14	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Cyanide, Total	1280	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

All metals results are dissolved (field filtered) unless noted.
NA - Not applicable.
NR - (Analysis) Not Requested.
μg/l - Micrograms per liter (all results reported in this unit)

Qualifiers
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.
J *- Indicates there was contamination in the method blank.
B - Estimated result; Result is less than the Reporting Limit.

TABLE 4
GROUNDWATER QUALITY ANALYSES SUMMARY
JUNE 2007 KEY WELL SAMPLING EVENT
Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Rd, York PA 17402

Sample ID Sample Date Units	MW-40S 6/25/2007 ug/L	MW-43D 6/25/2007 ug/L	MW-43S 6/25/2007 ug/L	MW-47 6/29/2007 ug/L	MW-50D 6/28/2007 ug/L	MW-50S 6/28/2007 ug/L	MW-51D 6/29/2007 ug/L	MW-51S 6/29/2007 ug/L	MW-51S Duplicate 6/29/2007 ug/L	MW-54 6/27/2007 ug/L	MW-64D 6/28/2007 ug/L	MW-64S 6/29/2007 ug/L	MW-69 6/27/2007 ug/L	MW-74D 6/28/2007 ug/L	MW-74S 6/28/2007 ug/L	MW-74S Duplicate 6/28/2007 ug/L	MW-75D 6/29/2007 ug/L	MW-75S 6/29/2007 ug/L	MW-79 6/25/2007 ug/L	MW-81D 6/28/2007 ug/L
Volatile Organic Compounds																				
1,1,1-Trichloroethane	0.79 U	1.6 U	0.79 U	2.5 J	79 U	4 U	0.79 U	82	94	17 J	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	190 J	160 U	0.79 U	4 U
1,1,2,2-Tetrachloroethane	0.63 U	1.3 U	0.63 U	0.63 U	63 U	3.1 U	0.63 U	7.8 U	9.4 U	3.1 U	3.1 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	25 U	130 U	0.63 U	3.1 U
1,1,2-Trichloroethane	0.79 U	1.6 U	0.79 U	0.79 U	79 U	4 U	0.79 U	9.9 U	12 U	4.2 J	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	32 U	160 U	0.79 U	4 U
1,1-Dichloroethane	1 U	2 U	1 U	1 U	1600	19 J	7.8	13 U	15 U	21 J	5.1 U	1 U	1 U	1 U	1 U	1 U	41 U	200 U	9.8	5.1 U
1,1-Dichloroethene	0.87 U	1.7 U	0.87 U	8.9	630	19 J	13	100	110	110	4.4 U	0.87 U	2.5 J	3.2 J	0.87 U	0.87 U	35 U	170 U	0.87 U	4.4 U
1,2-Dichloroethane	0.64 U	1.3 U	0.64 U	0.64 U	64 U	3.2 U	0.64 U	8 U	9.6 U	6.4 J	3.2 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	26 U	130 U	0.64 U	3.2 U
1,2-Dichloroethene (cis)	1 U	11	1 U	65	5000	430	88	660	750	150	5 U	1 U	160	49	40	40	840	630 J	22	87
1,2-Dichloroethene (trans)	0.9 U	1.8 U	0.9 U	0.9 U	90 U	4.5 U	0.9 U	11 U	14 U	4.5 U	4.5 U	0.9 U	1.3 J	0.9 U	0.9 U	0.9 U	36 U	180 U	0.9 U	4.5 U
1,2-Dichloropropane	0.67 U	1.3 U	0.67 U	0.67 U	67 U	3.3 U	0.67 U	8.3 U	10 U	3.3 U	3.3 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	27 U	130 U	0.67 U	3.3 U
1,3-Dichloropropene (cis)	0.79 U	1.6 U	0.79 U	0.79 U	79 U	4 U	0.79 U	9.9 U	12 U	4 U	4 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	32 U	160 U	0.79 U	4 U
1,3-Dichloropropene (trans)	0.57 U	1.1 U	0.57 U	0.57 U	57 U	2.8 U	0.57 U	7.1 U	8.5 U	2.8 U	2.8 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	23 U	110 U	0.57 U	2.8 U
1,4-Dioxane	170 U	340 U	170 U	170 U	17000 U	860 U	170 U	2200 U	2600 U	860 U	860 U	170 U	170 U	170 U	170 U	170 U	6900 U	34000 U	170 U	860 U
2-Chloroethylvinyl Ether	1.1 U	2.2 U	1.1 U	1.1 U	110 U	5.5 U	1.1 U	14 U	17 U	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	44 U	220 U	1.1 U	5.5 U
Acrolein	16 U	32 U	16 U	16 U	1600 U	79 U	16 U	200 U	240 U	79 U	79 U	16 U	16 U	16 U	16 U	16 U	630 U	3200 U	16 U	79 U
Acrylonitrile	8.1 U	16 U	8.1 U	8.1 U	810 U	41 U	8.1 U	100 U	120 U	41 U	41 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	320 U	1600 U	8.1 U	41 U
Benzene	0.81 U	1.6 U	0.81 U	0.81 U	81 U	4.1 U	0.81 U	10 U	12 U	4.1 U	4.1 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	33 U	160 U	0.81 U	4.1 U
Bromoform	0.37 U	0.74 U	0.37 U	0.37 U	37 U	1.8 U	0.37 U	4.6 U	5.5 U	1.8 U	1.8 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	15 U	74 U	0.37 U	1.8 U
Bromomethane	0.75 U	1.5 U	0.75 U	0.75 U	75 U	3.7 U	0.75 U	9.4 U	11 U	3.7 U	3.7 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	30 U	150 U	0.75 U	3.7 U
Carbon Tetrachloride	0.91 U	1.8 U	0.91 U	0.91 U	91 U	4.6 U	0.91 U	11 U	14 U	4.6 U	4.6 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	37 U	180 U	0.91 U	4.6 U
Chlorobenzene	0.71 U	1.4 U	0.71 U	0.71 U	71 U	3.6 U	0.71 U	8.9 U	11 U	3.6 U	3.6 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	28 U	140 U	0.71 U	3.6 U
Chlorodibromomethane	0.5 U	1 U	0.5 U	0.5 U	50 U	2.5 U	0.5 U	6.2 U	7.5 U	2.5 U	2.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	20 U	100 U	0.5 U	2.5 U
Chloroethane	1.1 U	2.2 U	1.1 U	1.1 U	110 U	5.5 U	1.1 U	14 U	17 U	5.5 U	5.5 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	44 U	220 U	1.1 U	5.5 U
Chloroform	0.78 U	1.6 U	0.78 U	0.78 U	78 U	3.9 U	0.78 U	9.7 U	12 U	3.9 U	3.9 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	31 U	160 U	0.78 U	3.9 U
Chloromethane	0.87 U	1.7 U	0.87 U	0.87 U	87 U	4.4 U	0.87 U	11 U	13 U	4.4 U	4.4 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	35 U	170 U	0.87 U	4.4 U
Dichlorobromomethane	0.58 U	1.2 U	0.58 U	0.58 U	58 U	2.9 U	0.58 U	7.3 U	8.7 U	2.9 U	2.9 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	23 U	120 U	0.58 U	2.9 U
Ethylbenzene	0.58 U	1.2 U	0.58 U	0.58 U	58 U	2.9 U	0.58 U	7.3 U	8.8 U	2.9 U	2.9 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	23 U	120 U	0.58 U	2.9 U
Methyl Ethyl Ketone	0.73 U	1.5 U	0.73 U	0.73 U	73 U	3.7 U	0.73 U	9.2 U	11 U	3.7 U	3.7 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	29 U	150 U	0.73 U	3.7 U
Methylene Chloride	0.75 U	1.5 U	0.75 U	0.75 U	75 U	3.8 U	0.75 U	9.4 U	11 U	3.8 U	3.8 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	30 U	150 U	0.75 U	3.8 U
Tetrachloroethene	0.57 U	5 J	0.57 U	40	740	51	8.2	1300	1100	50 J	280	110	7.5 J	8.7	4.4 J	5.1	1300	25000	0.57 U	17 J
Toluene	0.8 U	1.6 U	0.8 U	0.8 U	80 U	4 U	0.8 U	10 U	12 U	4 U	4 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	32 U	160 U	0.8 U	4 U
Trichloroethene	0.88 U	230	0.88 U	140	6900	660	190	1400	1600	410	680	240	25	95	50	52	3800	9500	2.5 J	300
Vinyl Chloride	0.94 U	1.9 U	0.94 U	0.94 U	94 U	4.7 U	0.94 U	25 J	28 J	4.7 U	4.7 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	38 U	190 U	0.94 U	4.7 U
Total VOCs	0	241	0	253.9	14870	1141	307	3542	3654	720	960	350	192.5	152.7	90	97.1	5940	34500	31.8	387
Metals																				
Chromium - DISS	NR	1.2 U	1.2 U	3580	NR	NR	2.8 B	253	NR	1.2 U	NR	NR	NR	1.2 B	2.1 B	NR	2 B	1.2 U	NR	NR
Hexavalent Chromium	NR	2.6 U	2.6 U	3000	NR	NR	2.6 U	260	NR	2.6 U	NR	NR	NR	2.6 U	2.6 U	NR	2.6 U	2.6 U	NR	NR
Lead - DISS	NR	2.4 U	2.4 U	2.4 U	NR	NR	2.4 U	2.4 U	NR	2.4 U	NR	NR	NR	2.4 U	2.4 U	NR	2.4 U	2.4 U	NR	NR
Nickel - DISS	NR	1.1 U	2.5 B	2.4 B	NR	NR	3 B	26.4 B	NR	1.1 U	NR	NR	NR	1.1 U	1.1 U	NR	1.4 B	1.6 B	NR	NR
Zinc - DISS	NR	6.1 B J*	14.6 B J*	4.2 B J*	NR	NR	4 B J*	6.3 B J*	NR	6.8 B J*	NR	NR	NR	4.3 B J*	7.2 B J*	NR	18.1 B J*	8.4 B J*	NR	NR
Cyanide																				
Cyanide (Available)	NR	NR	NR	NR	NR	NR	NR	1.5 U	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Cyanide, Total	NR	NR	NR	NR	NR	NR	NR	10.2	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR

All metals results are dissolved (field filtered) unless noted.
NA - Not applicable.
NR - (Analysis) Not Requested.
µg/l - Micrograms per liter (all results reported in this unit)

Qualifiers
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.
J *- Indicates there was contamination in the method blank.
B - Estimated result; Result is less than the Reporting Limit.

TABLE 4
GROUNDWATER QUALITY ANALYSES SUMMARY
JUNE 2007 KEY WELL SAMPLING EVENT

Harley-Davidson Motor Company Operations, Inc.
York Vehicle Operations
1425 Eden Rd, York PA 17402

Sample ID Sample Date Units	MW-81S 6/28/2007 ug/L	MW-82 6/26/2007 ug/L	MW-85 6/26/2007 ug/L	MW-87 Duplicate 6/28/2007 ug/L	MW-87 6/28/2007 ug/L	MW-88 6/28/2007 ug/L	MW-91 6/28/2007 ug/L	MW-92 Duplicate 6/27/2007 ug/L	MW-92 6/27/2007 ug/L	MW-93D 6/27/2007 ug/L	MW-93S 6/27/2007 ug/L	RW-2 6/26/2007 ug/L	RW-5 6/26/2007 ug/L	Trip Blank 1 6/25/2007 ug/L	Trip Blank 2 6/26/2007 ug/L	Trip Blank 3 6/27/2007 ug/L	Trip Blank 4 6/28/2007 ug/L	Trip Blank 5 6/29/2007 ug/L
Volatile Organic Compounds																		
1,1,1-Trichloroethane	20 U	0.79 U	0.79 U	NR	9.9 U	0.79 U	0.79 U	0.79 U	0.79 U	37	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,1,2,2-Tetrachloroethane	16 U	0.63 U	0.63 U	NR	7.8 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
1,1,2-Trichloroethane	20 U	0.79 U	0.79 U	NR	9.9 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,1-Dichloroethane	25 U	1 U	1 U	NR	13 U	1 U	1 U	1 U	1 U	2.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	37 J	0.87 U	0.87 U	NR	29 J	0.87 U	0.87 U	0.87 U	0.87 U	6	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U
1,2-Dichloroethane	16 U	0.64 U	0.64 U	NR	8 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U	0.64 U
1,2-Dichloroethene (cis)	1000	9.8	130	NR	850	15	1 U	1.1 J	1 U	37	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene (trans)	23 U	0.9 U	0.9 U	NR	11 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U	0.9 U
1,2-Dichloropropane	17 U	0.67 U	0.67 U	NR	8.3 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
1,3-Dichloropropene (cis)	20 U	0.79 U	0.79 U	NR	9.9 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U	0.79 U
1,3-Dichloropropene (trans)	14 U	0.57 U	0.57 U	NR	7.1 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U
1,4-Dioxane	4300 U	170 U	170 U	NR	2200 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U	170 U
2-Chloroethylvinyl Ether	28 U	1.1 U	1.1 U	NR	14 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Acrolein	400 U	16 U	16 U	NR	200 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U	16 U
Acrylonitrile	200 U	8.1 U	8.1 U	NR	100 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U
Benzene	20 U	0.81 U	0.81 U	NR	10 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U	0.81 U
Bromoform	9.2 U	0.37 U	0.37 U	NR	4.6 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
Bromomethane	19 U	0.75 U	0.75 U	NR	9.4 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Carbon Tetrachloride	23 U	0.91 U	0.91 U	NR	11 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U
Chlorobenzene	18 U	0.71 U	0.71 U	NR	8.9 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U	0.71 U
Chlorodibromomethane	12 U	0.5 U	0.5 U	NR	6.2 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Chloroethane	28 U	1.1 U	1.1 U	NR	14 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Chloroform	19 U	0.78 U	0.78 U	NR	9.7 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	0.78 U	1.2 J	0.78 U	0.78 U	0.78 U	11	0.78 U	0.78 U
Chloromethane	22 U	0.87 U	0.87 U	NR	11 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U	0.87 U
Dichlorobromomethane	15 U	0.58 U	0.58 U	NR	7.3 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	5.5	0.58 U	0.58 U
Ethylbenzene	15 U	0.58 U	0.58 U	NR	7.3 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
Methyl Ethyl Ketone	18 U	0.73 U	0.73 U	NR	9.2 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U	0.73 U
Methylene Chloride	19 U	0.75 U	1.3 J	NR	9.4 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U	0.75 U
Tetrachloroethene	57 J	0.57 U	0.57 U	NR	26 J	2.5 J	130	230 J	160 J	170 J	2.1 J	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	0.57 U	1.5 J
Toluene	20 U	0.8 U	0.8 U	NR	10 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	1.3 J	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Trichloroethene	3100	0.88 U	16	NR	1300	44	21	71	53	180	0.88 U	2.1 J	2.5 J	0.88 U	0.88 U	0.88 U	1.5 J	1.6 J
Vinyl Chloride	24 U	0.94 U	0.94 U	NR	12 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U	0.94 U
Total VOCs	4100	9.8	146	NR	2150	59	151	301	213	430	0	0	0	0	0	16.5	0	0
Metals																		
Chromium - DISS	NR	NR	1.2 U	1.2 U	1.2 U	1.2 U	NR	NR	NR	1.2 U	2.4 B	NR	NR	NR	NR	NR	NR	NR
Hexavalent Chromium	NR	NR	2.6 U	2.6 U	2.6 U	2.6 U	NR	NR	NR	2.6 U	2.6 U	NR	NR	NR	NR	NR	NR	NR
Lead - DISS	NR	NR	2.4 U	2.4 U	2.4 U	2.4 U	NR	NR	NR	2.4 U	2.4 U	NR	NR	NR	NR	NR	NR	NR
Nickel - DISS	NR	NR	1.9 B	1.1 U	1.2 B	1.1 U	NR	NR	NR	1.3 B	1.1 U	NR	NR	NR	NR	NR	NR	NR
Zinc - DISS	NR	NR	6.6 B J*	13.7 B J*	13.3 B J*	2.5 B J*	NR	NR	NR	9.9 B J*	3.3 B J*	NR	NR	NR	NR	NR	NR	NR
Cyanide																		
Cyanide (Available)	NR	NR	NR	NR	NR	NR	1.5 U	NR	1.5 U	1.5 U	1.5 U	NR	NR	NR	NR	NR	NR	NR
Cyanide, Total	NR	NR	NR	NR	NR	NR	59.7	NR	23.4 J*	1.8 B J*	1.7 U	NR	NR	NR	NR	NR	NR	NR

All metals results are dissolved (field filtered) unless noted.
NA - Not applicable.
NR - (Analysis) Not Requested.
µg/l - Micrograms per liter (all results reported in this unit)

Qualifiers
U - The compound was not detected at the indicated concentration.
J - Data indicates the presence of a compound that meets the identification criteria. The concentration given is an approximate value.
J *- Indicates there was contamination in the method blank.
B - Estimated result; Result is less than the Reporting Limit.