July 10, 2007

Mr. Mark Arthur
MC-127
Environmental Cleanup Section I, Team 3, Remediation Division
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

Subject: Correction Action Monitoring Report: 2007 First Semi-Annual Event
Houston Wood Preserving Works, Houston, Texas
TCEQ SWR No. 31547; Hazardous Solid Waste Permit No. 50343

Dear Dr. Arthur:

Please find enclosed with this letter two copies of the Corrective Action Monitoring Report: 2007 First Semi-Annual Event. The report was prepared in accordance with Section VII.C.2 of Compliance Plan No. CP-50343, which was issued in conjunction with Post-Closure Care Permit No. HW-50343, both dated June 10, 2005.

If you have any questions, please feel free to contact me at (281) 350-7197.

Sincerely,

Geoffrey Reeder

Geoffrey B. Reeder, P.G.

GBR/ecm

cc: Nicole Bealle, TCEQ Region 12 - Houston (w/enclosure)
Eric C. Matzner, P.G., Pastor, Behling & Wheeler, LLC (w/o enclosure)

Geoffrey Reeder, P.G.
Manager, Environmental Site Remediation

UNION PACIFIC RAILROAD
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CORRECTIVE ACTION MONITORING REPORT
2007 FIRST SEMIANNUAL EVENT

FORMER HOUSTON WOOD PRESERVING WORKS
4910 LIBERTY ROAD
HOUSTON, TEXAS

July 6, 2007

Prepared for:

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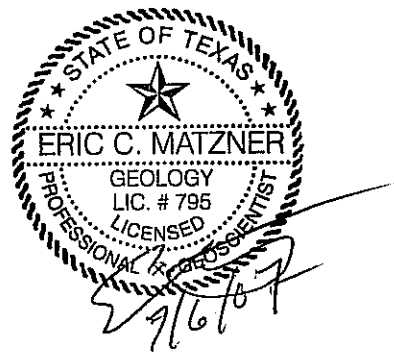

PBW Project No. 1358

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1.0 EXECUTIVE SUMMARY

This semi-annual report presents a summary and evaluation of the Corrective Action Groundwater Monitoring for the Closed Surface Impoundment (Solid Waste Management Unit No. 1) at the former Houston Wood Preserving Works facility (the Site) located in Houston, Texas. The groundwater monitoring activities for this period were performed by Pastor, Behling and Wheeler, LLC (PBW) in January 2007.

Groundwater elevation data collected during the January 2007 sampling event indicate groundwater flow to the south southwest at a hydraulic gradient of approximately 0.005ft/ft in the A-Transmissive Zone (A-TZ). The A-TZ groundwater flow direction for this event changed slightly relative to the groundwater flow direction that was to the southwest observed during the July 2006 2nd semi-annual monitoring event. Groundwater elevation data collected in the B-Transmissive Zone (B-TZ) indicate groundwater flow to the north northwest with a hydraulic gradient of approximately 0.005 ft/ft. Groundwater flow in the B-TZ zone is similar to the flow direction observed during the July 2006 sampling event.

Analytical results were compared to Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program (TRRP) Protective Concentration Limits (PCLs), as designated in Section IV.D of the Compliance Plan, dated June 10, 2005. Analyzed constituent concentrations were below their respective PCLs; therefore, monitoring wells in both the A-TZ and B-TZ are considered to be complaint for this monitoring period.

2.0 INTRODUCTION

This semi-annual report presents a summary and evaluation of groundwater monitoring data collected during the semi-annual 2007 monitoring period at the former Houston Wood Preserving Works facility (the Site) located at 4910 Liberty Road in Houston, Texas (Figure 1). Semi-annual groundwater monitoring is required for the Site as a condition of the Texas Commission on Environmental Quality (TCEQ) Hazardous Waste Permit No. 50343 and associated Compliance Plan (CP) No. 50343, both renewed and issued on June 10, 2005. Groundwater monitoring at the Site is performed to monitor groundwater quality beneath the Closed Surface Impoundment Unit No. 001 (Solid Waste Management Unit (SWMU) No. 1).

Pastor, Behling and Wheeler, LLC (PBW) conducted groundwater monitoring activities at the Site on January 22-23, 2007. Groundwater monitoring activities included sampling and gauging the background and point of compliance (POC) wells and piezometers associated with SWMU No. 1. The sampling event, analytical data, and data evaluation provided in this report fulfill the semi-annual corrective action reporting requirements for the first half of 2007 as described in the CP, Section VII.C.2, which requires the following reporting components:

Semi-Annual Corrective Action Report Requirements	**Report Section, Table(s) and/or Figure(s)**
A narrative summary of the evaluations made in accordance with CP Sections V, VI, and VII for the preceding six-month period. These periods shall be January 1 through June 30 and July 1 through December 31 (VII.C.2.a.)	3.0
Summary of Methods utilized for management of recovered/purged water (VII.C.2.b.)	3.2
An updated table and map of the monitoring and corrective action system wells (VII.C.2.c.)	3.1.1 Figure 2
The results of the chemical analyses, submitted in a tabulated format in a form acceptable to the Executive Director, which clearly indicates each parameter that exceeds the Groundwater Protection Standard (GWPS). Copies of the original laboratory report for chemical analyses showing detection limits and quality control and quality assurance data shall be provided if requested by the Executive Director (VII.C.2.d.)	Tables 1 & 2 Appendix C
Tabulation of the water level elevations (relative to mean sea level), depth to water measurements, and total depth of well measurements collected since the data that was submitted in the previous semiannual report (VII.C.2.e.)	Table 4
Potentiometric surface maps showing the elevation of the water table at the time of sampling and direction of groundwater flow gradients (VII.C.2.f.)	Figures 3 & 4
A notation of the presence or absence of non-aqueous phase liquids (NAPLs), both light and dense phases, in each well during each sampling event since the last event covered in the previous semiannual report and tabulation of depth and thickness of NAPLs, if detected (VII.C.2.g.)	Table 4

Semi-Annual Corrective Action Report Requirements (cont'd)	Report Section, Table(s) and/or Figure(s)
Quarterly tabulations of quantities of recovered groundwater and NAPLs, and graphs of monthly recorded flow rates versus time for the recovery wells during each period. A narrative summary describing and evaluating the NAPL recovery program shall also be included (VII.C.2.h.)	Not Applicable
Tabulation of the total contaminant mass recovered from each recovery system for each reporting period, if such a system is installed (VII.C.2.i.)	Not Applicable
Tabulation of the data evaluation results pursuant to Section VI.D and status of each well listed on CP Table V with regard to compliance with the corrective action objectives and compliance with the GWPSs (VII.C.2.j.)	Table 5
Maps of the contaminated area depicting concentrations of constituents listed in Table IV and any newly detected Table III constituents as isopleths contours or discrete concentrations if isopleths contours cannot be inferred (VII.C.2.k.)	Not Applicable
Maps indicating the extent and thickness of the LNAPLs and DNAPLs, if detected (VII.C.2.l.)	Not Detected
An updated schedule summary as required by Section X (VII.C.2.m.)	Appendix D
Summary of any changes made to the monitoring/corrective action program and a summary of recovery well inspections, repairs, and any operational difficulties (VII.C.2.n.)	None
A table of the modifications and amendments made to this Compliance Plan with their corresponding approval dates by the executive director or the Commission and a brief description of each action (VII.C.2.o.)	None
Corrective Measures Implementation (CMI) Report to be submitted in accordance with Section VIII.F, if necessary (VII.C.2.p.)	Not Applicable
Tabulation of well casing elevations in accordance with Attachment B No. 16 (VII.C.2.q.)	Table 4
Recommendation for any changes (VII.C.2.r.)	None
Certification and well installation diagram for any new well installation or replacement and certification for any well plugging and abandonment (VII.C.2.s.)	Not Applicable
A summary of any activity within an area subject to institutional control (VII.C.2.t.)	None
Any other items requested by the Executive Director (VII.C.2.u.)	None

As of February 19, 2007, a recovery system had not been installed at this facility. Therefore, Provisions 8, 9, and 10 that relate to recovery wells or recovery system, are not applicable to this reporting period.

Responses to each of the semi-annual report provisions required by CP Section VII.C.2 are provided in Section 3.0. Conclusions and recommendations are provided in Section 4.0.

3.0 2007 FIRST SEMIANNUAL GROUNDWATER MONITORING EVENT

A discussion of each of the semi-annual report provisions required by CP Section VII.C.2, are presented below by reference number to the list of provisions in Section 2.0.

3.1 Narrative Summary of First Semi-annual Monitoring Activities

The CP requires an evaluation of the Corrective Action Program (Section V) and Groundwater Monitoring Program summarizing the overall effectiveness of the Corrective Action Program (Section VI). This narrative summary includes provisions for response and reporting requirements as detailed in the CP Section VII, as discussed below.

3.1.1 Corrective Action Program

Groundwater samples were collected from the Background and POC wells (as detailed in CP Table V, which is provided in Appendix A) to assess potentially affected groundwater quality in the A-Transmissive Zone (A-TZ) and the B-Transmissive Zone (B-TZ). These water-bearing zones are defined as:

- A-TZ refers to the first sand unit encountered at approximately 13 feet below ground surface (bgs) and averages 7 feet in thickness; and
- B-TZ refers to the second sand unit encountered at approximately 30 feet bgs and averages 9 feet in thickness.

The definitions of the A-TZ and B-TZ are consistent with the Uppermost Transmissive Zone (UTZ) and Second Transmissive Zone (STZ), respectively, as defined in CP Provision I.A.

The following monitor wells were sampled during this event (Figure 2):

- A-TZ POC wells: MW-01A, MW-02, MW-07, MW-10A, and MW-11A;
- A-TZ Background well: MW-08;
- B-TZ POC wells: MW-10B, MW-11B, and P-10; and
- B-TZ background well: P-12.

3.1.2 Groundwater Monitoring

PBW performed quarterly well inspections and semi-annual groundwater sampling activities on January 22, 2007. Groundwater sampling was performed using procedures outlined in a U.S. EPA document titled *Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures* (EPA/540/S-95/504) published in April 1996 and approved in the CP application. Groundwater samples were analyzed for the Detected Hazardous and Solid Waste Constituents listed in the CP, Table III (Appendix A).

Monitoring wells are equipped with dedicated polytetrafluoroethylene (PTFE) tubing for groundwater sampling. A Master-Flex® peristaltic pump was used to collect the groundwater samples. An approximate one-foot section of disposable silicon tubing was placed around the pump head and attached to the PTFE tubing for proper operation of the pump. Groundwater was pumped from the screened interval of each well at a flow rate of less than 0.5 L/min using a flow-through cell, field parameters including temperature, pH, specific conductivity, dissolved oxygen, and turbidity were measured during purging and sampling activities. When field parameters had stabilized to the EPA-specified criteria, a sample was then collected for analysis. The samples were also collected at a flow rate of less than 0.5 L/min. Recorded field parameters are summarized in Appendix B.

For each well, sample bottles were filled directly from the pumping apparatus described above, and were sealed and packed in coolers with sufficient ice to maintain a sample temperature of approximately 4°C. The sample coolers were delivered to Severn Trent Laboratory, in Houston, Texas for analysis. Chain-of-Custody (COC) forms were completed and kept with their respective samples. Copies of the analytical data and COCs are included in Appendix C. Groundwater samples were then analyzed for the Detected Hazardous and Solid Waste Constituents listed in the CP, Table III (Appendix A).

3.2 Purge Water Management

Approximately 10 gallons of purge water was generated during the January 2007 low-flow groundwater sampling event. The purge water was containerized in a Department of Transportation (DOT) certified, 55-gallon steel drum and temporarily stored on site in a fenced and locked container storage area (NOR 006). Since the groundwater sampled and analyzed

during this event did not contain hazardous constituents above the applicable health-based levels (i.e. PCLs discussed in Section 3.10), the purge water generated was not considered hazardous in accordance with the EPA "contained-in determination" detailed in the 1986 EPA memorandum "RCRA Regulatory Status of Contaminated Groundwater". Purge water was disposed of at the US Ecology Facility in Robstown, Texas on May 10, 2007.

3.3 Monitoring and Corrective Action System Wells

A summary of the current monitoring and corrective action groundwater wells is discussed in Section 3.1.1. Configuration of the current monitoring and corrective action well network is presented on Figure 2.

3.4 Analytical Results

The 2007 semi-annual groundwater analytical results from the A-TZ and B-TZ are summarized in Tables 1 and 2, respectively and the laboratory analytical report is provided in Appendix C. The analytical results were compared to the Detected Hazardous and Solid Waste Constituent limits, which are taken from the TCEQ TRRP Tier 1 PCLs. TRRP PCLs serve as the Groundwater Protection Standard (GWPS), as detailed in Section IV.D and Table III of the CP. If any concentrations exceeded the concentration limits of this report, the concentration is bolded within the table.

Quality assurance/quality control (QA/QC) samples (field blank, matrix spike and matrix spike duplicate results) are summarized in Table 3.

3.5 Well Measurements

During the sampling event, the following information was recorded at each monitoring well:

Before Sampling

- The presence of light NAPLs was evaluated; and
- Depth to groundwater below the top of casing was measured to the nearest 0.01 foot.

After Sampling

- The presence of dense non-aqueous phase liquids (DNAPLs) was evaluated using visual observations and an oil-water interface probe; and
- Total well depths of the wells were measured.

Table 4 provides a summary of these measurements. None of the compliance wells had measurable amounts of LNAPL or DNAPL.

3.6 Potentiometric Surface Maps

The groundwater elevation data recorded during the 2007 first semi-annual monitoring event were used to create potentiometric surface maps of the A-TZ and B-TZ, presented on Figures 3 and 4, respectively.

Groundwater elevation data collected during the January 2007 sampling event indicate groundwater flow to the south southwest at a hydraulic gradient of approximately 0.005ft/ft in the A-Transmissive Zone (A-TZ). A-TZ groundwater flow direction has changed slightly relative to the groundwater flow direction observed during the July 2006 2nd semi-annual monitoring event. However, flow to the south and west in the A-TZ has been observed in the past (i.e. January 2006).

Groundwater elevation data collected in the B-Transmissive Zone (B-TZ) indicate groundwater flow to the west northwest with a hydraulic gradient of approximately 0.005 ft/ft. The groundwater flow in the B-TZ zone is similar to the flow direction observed during previous monitoring events.

3.7 Non-Aqueous Phase Liquids

Measurable amounts of LNAPL and/or DNAPL were not observed in any of the compliance wells.

3.8 Recovered Groundwater and NAPL

To date, a recovery system has not been installed at the Unit No. 1; therefore, this provision is not applicable.

3.9 Contaminant Mass Recovered

To date, a recovery system has no been installed at the Unit No. 1; therefore, this provision is not applicable.

3.10 Analytical Data Evaluation

Section VI.D of the CP describes two methods which may be used to determine the compliance status of a given well:

1) Analytical results may be either directly compared with PCLs (CP Table III; included in Appendix A), or
2) Analytical results can be statistically compared PCLs using the Confidence Interval Procedure for the mean concentration based on normal, log-normal, or non-parametric distribution, which the 95% confidence coefficient of the t-distribution will be used in construction of the confidence interval.

Direct comparison to PCLs was used to evaluate the analytical data. Tables 1 and 2 show the results of a direct comparison of data for this sampling event to the respective PCLs. Wells and piezometers are in compliance if each of the constituents listed in the CP Table III was reported at a concentration less than or equal to the PCL. Based on the analytical results from the January 2007 monitoring event the compliance wells completed in both transmissive zones are compliant with groundwater results below their respective PCLs; therefore the monitoring wells are considered to be complaint for this monitoring period. Compliance status for each of the monitoring wells is provided in Table 5.

Monitoring wells in A-TZ and B-TZ have not exceeded the established CP PCLs since July 2005, at which time dibenzofuran exceeded its respective PCL of 0.098 mg/L in MW-01A (0.11 mg/L). The monitoring wells have been complaint for three consecutive semi-annual monitoring events

A QA/QC review and Data Usability Summary (DUS) were prepared for the January 2007 analytical data. Analytical results were flagged based on the data validation review of the QA/QC samples. A summary of validated flagged data is provided below.

- The following samples were qualified as *Estimated (J)*:
  - P-10 and P-101 (DUP) for Acenaphthene
  - MW-01A, MW-01B (DUP) and MW-02 for Acenapththylene
  - MW-01A, MW-01B (DUP) and P-10 for Anthracene
  - MW-10B for bis(2-ethylhexyl)phthalate
  - P-101 (DUP) for Di-n-butyl phthalate
  - MW-10A and P-10 for Dibenzofuran;
  - MW-07 and P-10 for Fluorene;
  - MW-01A and MW-01B (DUP) for 2-Methylnapthalene;
  - MW-01A, MW-01B (DUP), MW-11B, P-10 and P-101 (DUP) for Napthalene;
  - MW-01A, MW-01B (DUP) and MW-02 for Phenanthrene; and
  - MW-11A and P-10 for Pyrene.

A DUS for the laboratory analyses is included in Appendix C, and validated qualifiers were added to the data tables (Tables 1 and 2). Based on the QA/QC data review, the analytical data are usable for the intended use.

3.11 Reported Concentration Maps

Reported concentrations of each constituent analyzed for the 2007 First Semi-Annual Groundwater Monitoring Event are presented on Figures 5 and 6 for the A-TZ and B-TZ compliance wells, respectively. In the event a constituent exceeded their respective PCL, the value would be highlighted on the figures. There were no exceedances of PCLs for any of the required constituents.

3.12 Extent of NAPL

Measurable amounts of LNAPL or DNAPL were not detected in any of the compliance wells.

3.13 Updated Compliance Schedule

Section X of the CP requires that the Permittee submit a schedule summarizing the activities required by the Compliance Plan issued on June 10, 2005, which was originally submitted to the TCEQ on August 4, 2004. An updated compliance schedule is included as Appendix D of this report.

3.14 Summary of Changes Made to Corrective Action Program

No changes have been made to the corrective action program.

3.15 Modifications and Amendments to Compliance Plan

A compliance plan renewal application was submitted to TCEQ on December 23, 2003 consistent with the renewal requirements for the RCRA permit at the site. The RCRA permit and CP were issued June 10, 2005. There have been no modifications or amendments to the Compliance Plan since the last permit issued.

3.16 Corrective Measures Implementation (CMI) Report

A Response Action Plan (RAP) has not been submitted; therefore, this provision does not apply.

3.17 Well Casing Elevations

Top-of-casing elevations referenced to feet above Mean Sea Level (MSL) for each compliance monitoring well are summarized in Table 4.

3.18 Recommendation for Changes

There are no recommendations for changes to the monitoring program or to the Corrective Action Program.

3.19 Well Installation and/or Abandonment

No monitoring wells were installed or abandoned as part of the monitoring program or the Corrective Action Program during the reporting period.

3.20 Activity Within Area Subject to Institutional Control

No areas are under institutional control; therefore, this provision does not apply.

3.21 Other Requested Items

No other items have been requested by the executive director.

TABLES

Table 1
Summary of Analytical Results for the A-Transmissive Zone (A-TZ)
Semiannual Monitoring Report: 2007 First Semiannual Event

Houston Wood Preserving Works
Houston, Texas

Analyte	PCL (mg/L)	Monitoring Well IDs (Concentrations mg/L)																				
		MW-01A			MW-01B (DUP)			MW-02			MW-07			MW-08			MW-10A			MW-11A		
		1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/22/2007	LQ	VQ	1/23/2007	LQ	VQ	1/23/2007	LQ	VQ
Acenaphthene	1.5	0.0509			0.0414			0.00675			<0.00004	U		<0.00004	U		0.000714			0.00685		
Acenaphthylene	1.5	0.00137		$J^{(v)}$	0.00095		$J^{(v)}$	0.00015	J		<0.00008	U		<0.00008	U		<0.00008	U		<0.00008	U	
Anthracene	7.3	0.00226		$J^{(v)}$	0.00145		$J^{(v)}$	0.000542			0.000353			<0.00004	U		0.0 00273			0.000287		
bis(2-ethylhexyl)phthalate	0.006	<0.00009	U		<0.00009	U		<0.00009	U		<0.00009	U		<0.00009	U		<0.00009	U		<0.00009	U	
Dibenzofuran	0.098	0.00839			0.00919			0.00488			<0.00006	U		<0.00006	U		0.00009	J		0.0019		
Fluoranthene	0.98	0.00251			0.00201			0.000625			<0.00004	U		<0.00004	U		<0.00004	U		0.000292		
Fluorene	0.98	0.0155			0.0155			0.00479			<0.00004	U		<0.00004	U		0.00015	J		0.00326		
2-Methylnaphthalene	0.098	0.000262		$J^{(v)}$	0.00199		$J^{(v)}$	<0.00008	U		<0.00008	U		<0.00008	U		<0.00008	U		<0.00008	U	
Naphthalene	0.49	0.000302		$J^{(v)}$	0.0048		$J^{(v)}$	0.000406			0.000637			<0.00007	U		<0.00007	U		0.00481		
Phenanthrene	0.73	0.000229		$J^{(v)}$	0.000664		$J^{(v)}$	0.00005	J		<0.00004	U		<0.00004	U		<0.00004	U		0.000829		
Pyrene	0.73	0.00105			0.000819			0.000299			<0.00004	U		<0.00004	U		<0.00004	U		0.00016	J	

Notes:
PCL = Protective Concentration Limit
The Compliance Plan Section IV.D defines the Groundwater Protection Standard (GWPS) as the PCL
MW-01B = duplicate sample collected at MW-01A

LQ - Lab Qualifier
J = Estimated value between the SQL and the MDL
U = Value not detected greater than the MDL

VQ - Validation Qualifier
$J^{(v)}$ = Estimated data; The reported sample concentration is approximate due to the exceedance of one or more QC requirements
$U^{(v)}$ = Blank affected; The analyte was not detected above 5x (10x for common contaminants) the level in an associated blank

Table 2
Summary of Analytical Results for the B-Transmissive Zone (B-TZ)
Semiannual Monitoring Report: 2007 First Semiannual Event

Houston Wood Preserving Works
Houston, Texas

Analyte	PCL (mg/L)	Monitoring Well IDs (Concentrations mg/L)														
		MW-10B			MW-11B			P-10			P-101 (DUP)			P-12		
		1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/23/2007	LQ	VQ	1/22/2007	LQ	VQ
Acenaphthene	1.5	0.0279			0.0125			0.0165		J[v]	0.00145		J[v]	<0.00004	U	
Acenaphthylene	1.5	0.00103			0.000315			<0.00008	U		<0.00008	U		<0.00008	U	
Anthracene	7.3	0.00126			0.000523			0.000437		J[v]	<0.00004	U	UJ[v]	<0.00004	U	
bis(2-ethylhexyl)phthalate	0.006	0.00016	J		<0.00009	U		<0.00009	U		<0.00009	U		<0.00009	U	
Dibenzofuran	0.098	0.00312			0.00295			0.0044		J[v]	<0.00006	U	UJ[v]	<0.00006	U	
Di-n-butyl phthalate	2.4	<0.0001	U		<0.0001	U		<0.0001	U		0.00014	J		<0.0001	U	
Fluoranthene	0.98	0.000745			0.000549			<0.00004	U		<0.00004	U		<0.00004	U	
Fluorene	0.98	0.00344			0.00231			0.00541		J[v]	<0.00004	U	UJ[v]	<0.00004	U	
Naphthalene	0.49	0.000242			0.00013	J		0.0204		J[v]	0.00146		J[v]	<0.00007	U	
Phenol	7.3	<0.00007	U		<0.00007	U		<0.00007	U		<0.00007	U		<0.00007	U	
Pyrene	0.73	0.000283			0.000319			0.000215		J[v]	<0.00004		UJ[v]	0.00312		

Notes:
PCL = Protective Concentration Limit
The Compliance Plan Section IV.D defines the Groundwater Protection Standard (GWPS) as the PCL
P-101 = duplicate sample collected at P-10

LQ - Lab Qualifier
J = Estimated value between the SQL and the MDL
U = Value not detected greater than the MDL
b = Target analyte was found in method blank at a concentration exceeding the MQL for samples collected on July 31, 2006

VQ - Validation Qualifier
$J^{(v)}$ = Estimated data; The reported sample concentration is approximate due to the exceedance of one or more QC requirements
$UJ^{(v)}$ = Analyte was not detected above the SQL; The reported sample concentration is approximate due to the exceedance of one or more QC requirements

Table 3
Summary of Analytical Results for Quality Assurance/Quality Control Samples
Semiannual Monitoring Report: 2007 First Semiannual Event

Houston Wood Preserving Works
Houston, Texas

Analyte	PCL (mg/L)	Sample IDs (Concentrations mg/L)		
		FB-072806	MW-10A(MS)[1]	MW-10A(MSD)[1]
		Field Blank	Matrix Spike	Matrix Spike Duplicate
		1/23/2007	1/23/2007	1/23/2007
Acenaphthene	1.5	<0.00004 U	0.00897	0.00924
Acenaphthylene	1.5	<0.00008 U	0.00785	0.00824
Anthracene	7.3	<0.00004 U	0.00792	0.00802
bis(2-ethylhexyl)phthalate	0.006	<0.00009 U	0.00747	0.00768
Dibenzofuran	0.098	<0.00006 U	0.00813	0.00829
Di-n-butyl phthalate	2.4	<0.0001 U	0.00928	0.00963
Fluoranthene	0.98	<0.00004 U	0.00921	0.00973
Fluorene	0.98	<0.00004 U	0.00823	0.00846
2-Methylnaphthalene	0.098	<0.00008 U	0.0081	0.00829
Naphthalene	0.49	<0.00007 U	0.00782	0.00803
Phenanthrene	0.73	<0.00004 U	0.00829	0.00861
Phenol	7.3	<0.00007 U	0.00337	0.00395
Pyrene	0.73	<0.00004 U	0.00833	0.00873

Notes:
PCL = Protective Concentration Limit
(1) = MW-10A(MS) and MW-10A(MSD) are matrix spike and matrix spike duplicate samples collected at MW-2, respectively.

Table 4

Water Level Measurements
Semiannual Monitoring Report: 2007 First Semi-Annual Event

Houston Wood Preserving Works
Houston, Texas

Well ID	Top of Casing Elevation (TOC) (ft MSL)	Date Measured	Water Depth (ft. BTOC)	Depth to NAPL (ft. BTOC)	Total Well Depth as Completed (ft. BTOC)	Total Well Depth (ft. BTOC)	Potentiometric Elevation (ft. MSL)
A-TZ Monitoring Locations							
MW-01A	47.92	1/22/2007	2.26	ND	20.2	19.90	45.66
MW-02	47.97	1/22/2007	2.34	ND	20.3	20.20	45.63
MW-07	48.86	1/22/2007	3.46	ND	NA	24.85	45.40
MW-08	49.33	1/22/2007	3.81	ND	26.8	25.10	45.52
MW-10A	49.86	1/22/2007	4.29	ND	25.9	25.60	45.57
MW-11A	50.05	1/22/2007	4.54	ND	24.4	24.10	45.51
B-TZ Monitoring Locations							
MW-10B	49.94	1/22/2007	4.45	ND	48.8	46.50	45.49
MW-11B	50.18	1/22/2007	4.13	ND	46.8	46.10	46.05
P-10	47.69	1/22/2007	2.36	ND	40.0	43.90	45.33
P-12	48.78	1/22/2007	3.19	ND	40.0	42.90	45.59

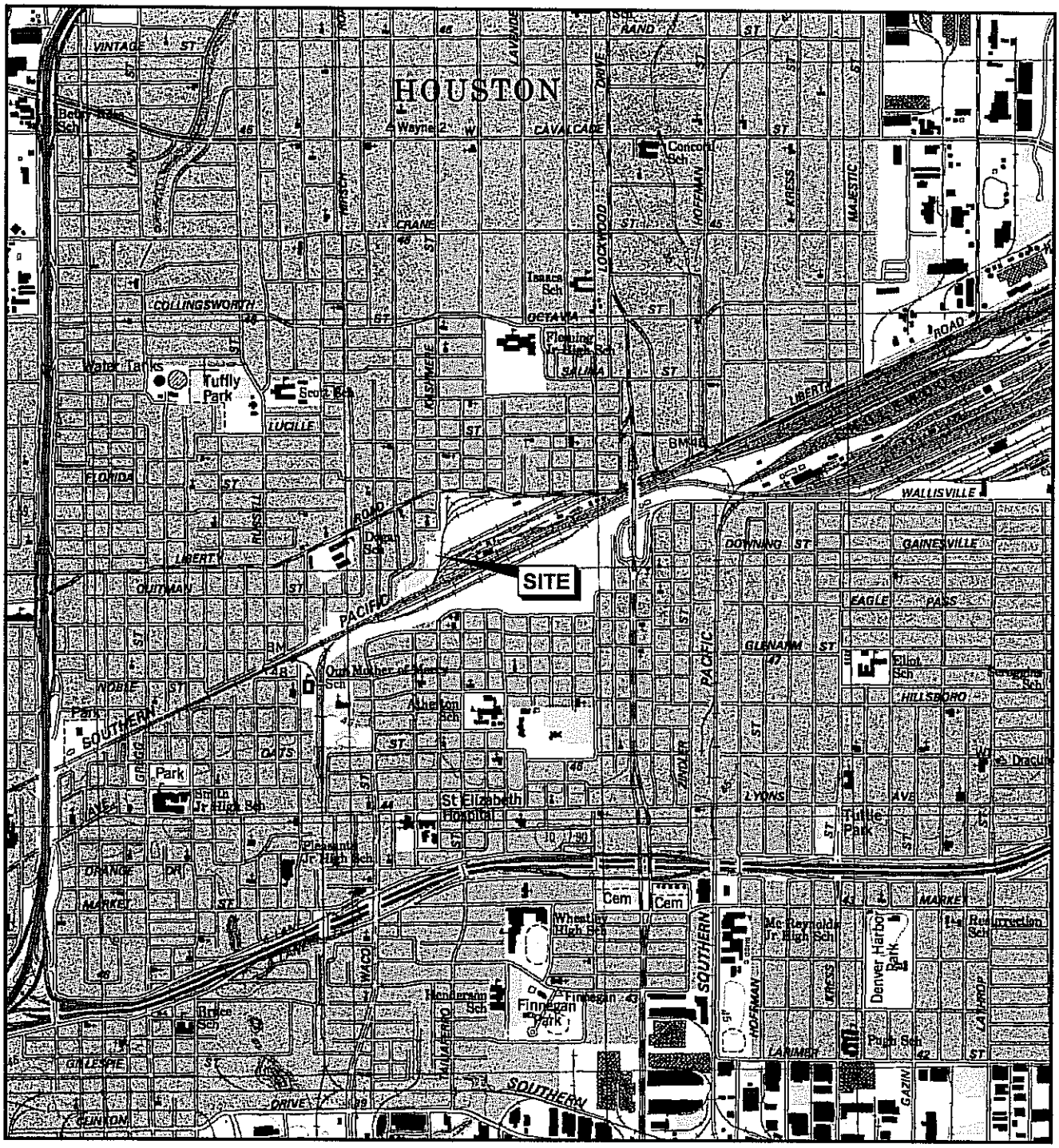
Notes
BTOC = feet below the top of the well casing
ft. MSL = feet above Mean Sea Level
NA = Information not available
ND = Not Detected

Table 5
Compliance Status of Wells and Piezometers
Semiannual Monitoring Report: 2007 First Semiannual Event

Houston Wood Preserving Works
Houston, Texas

Zone	Monitoring Well Location	Well Designation	Compliance Status
A-TZ Monitoring Location	MW-01A	Point of Compliance	Compliant
	MW-02	Point of Compliance	Compliant
	MW-07	Point of Compliance	Compliant
	MW-08	Background Well	Compliant
	MW-10A	Point of Compliance	Compliant
	MW-11A	Point of Compliance	Compliant
B-TZ Monitoring Location	MW-10B	Point of Compliance	Compliant
	MW-11B	Point of Compliance	Compliant
	P-10	Point of Compliance	Compliant
	P-12	Background Well	Compliant

FIGURES



QUADRANGLE LOCATION

Source:
U.S.G.S. 7.5 minute quadrangle, Settegast, Texas, 1982.

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HOUSTON WOOD PRESERVING WORKS

Figure 1

SITE LOCATION MAP

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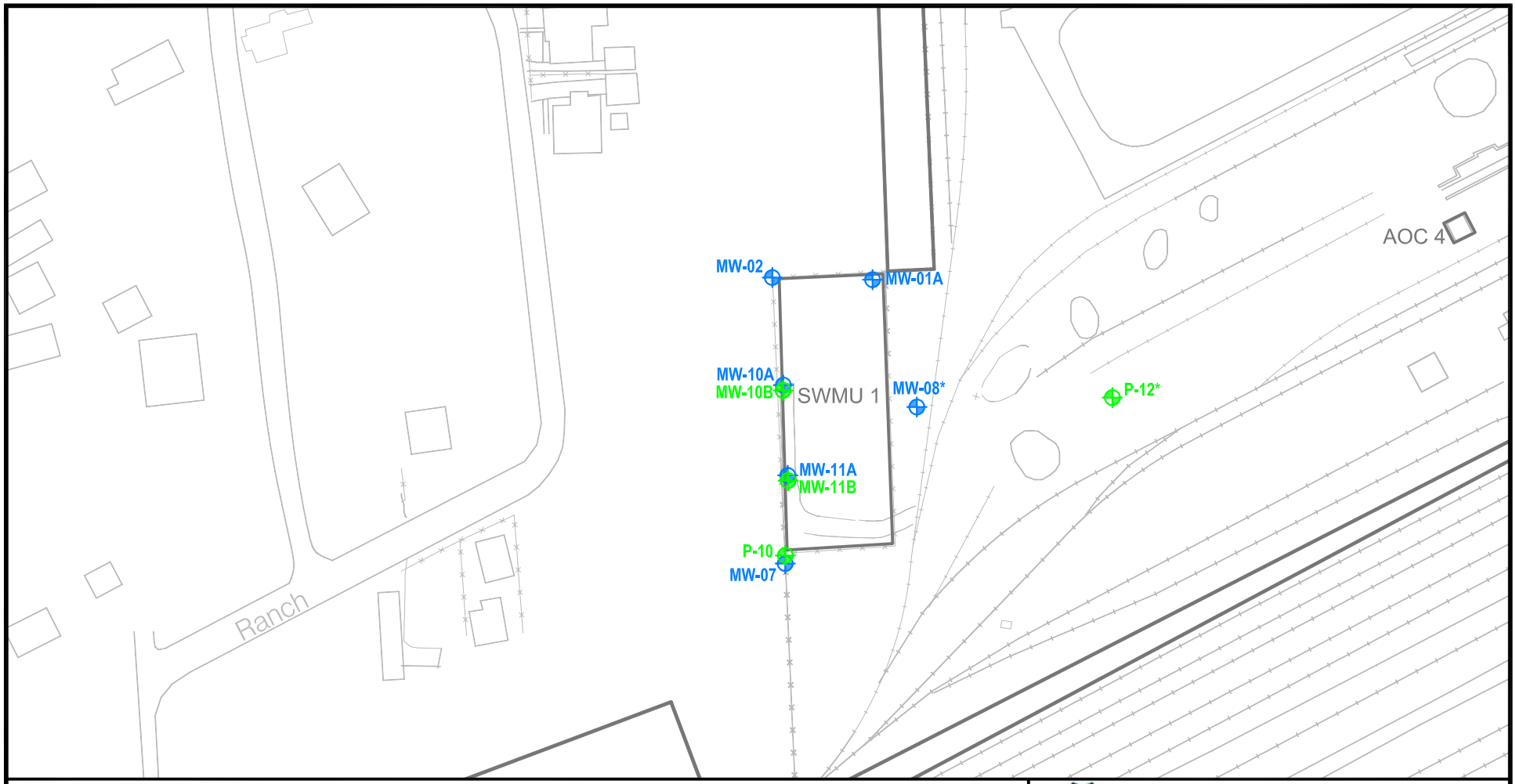

EXPLANATION

- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- Zone A Monitoring Well Location
- Zone B Monitoring Well Location

Note:
* Background well.

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N

Approx. Scale in Feet

0 60 120

Source:
Base map from ERM-Southwest, Inc 0014419a310.dwg, 6/19/2006.

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HOUSTON WOOD PRESERVING WORKS

Figure 2

CORRECTIVE ACTION MONITORING WELL NETWORK TCEQ PERMIT UNIT NO. 1

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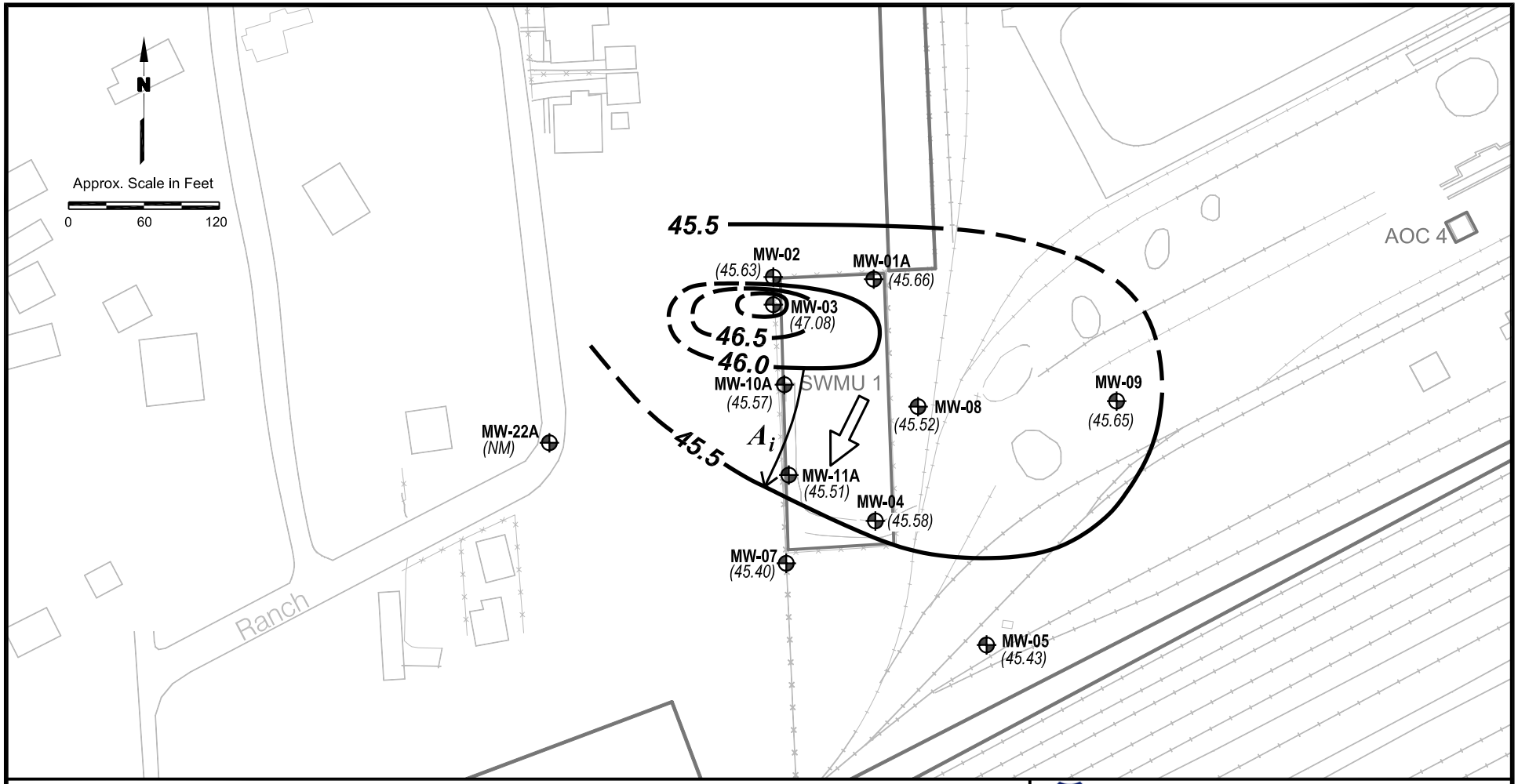

EXPLANATION

- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- Zone A Monitoring Well Location
- (45.57) Groundwater Elevation (Ft, MSL) (NM = Not Measured)
- 45.5 Groundwater Elevation Contour (Ft, MSL) C.I.= 0.5 Ft
- General Groundwater Flow Direction

ESTIMATED GRADIENT

A_i → $A_i = \frac{0.5ft}{100ft} = 0.005\ ft/ft$

Source:
Base map from ERM-Southwest, Inc
0014419a310.dwg, 6/19/2006.

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Figure 3

A-TZ POTENTIOMETRIC SURFACE CONTOUR MAP JANUARY 22, 2007

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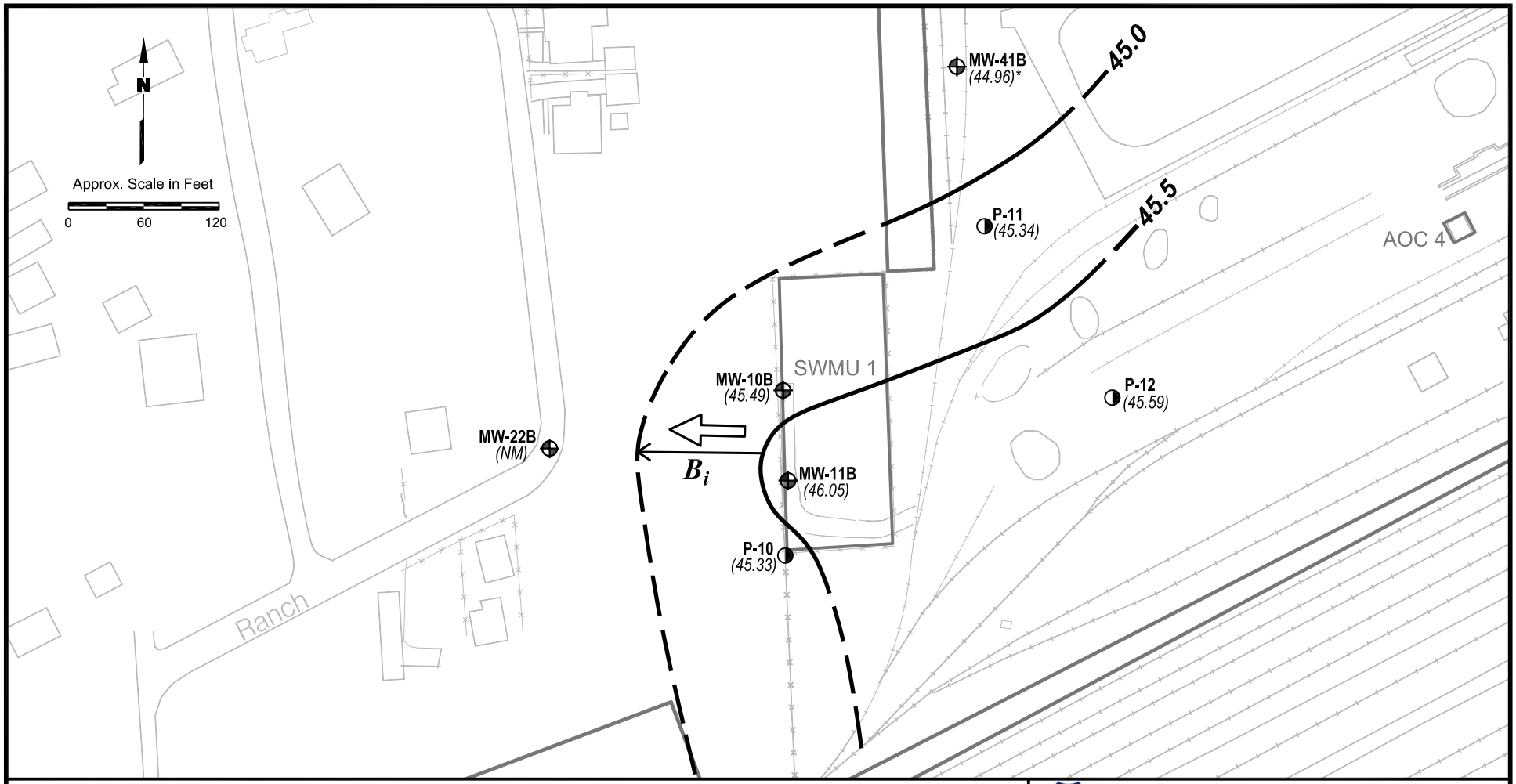

EXPLANATION

- Road, Parking Lot, Sidewalk
- Fence
- Railroad
- Zone B Monitoring Well Location
- Zone B Piezometer Location

(45.33) Groundwater Elevation (Ft, MSL)
(NM = Not Measured)
* Well Gauged March 7, 2007

−45.0− Groundwater Elevation Contour
(Ft, MSL) C.I.= 0.5 Ft

General Groundwater Flow Direction

ESTIMATED GRADIENT

B_i → $B_i = \frac{0.5ft}{100ft} = 0.005\ ft/ft$

Source:
Base map from ERM-Southwest, Inc
0014419a310.dwg, 6/19/2006.

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Figure 4

B-TZ POTENTIOMETRIC SURFACE CONTOUR MAP JANUARY 22, 2007

PROJECT: 1358	BY: ZGK	REVISIONS
DATE: JULY, 2007	CHECKED: ECM	

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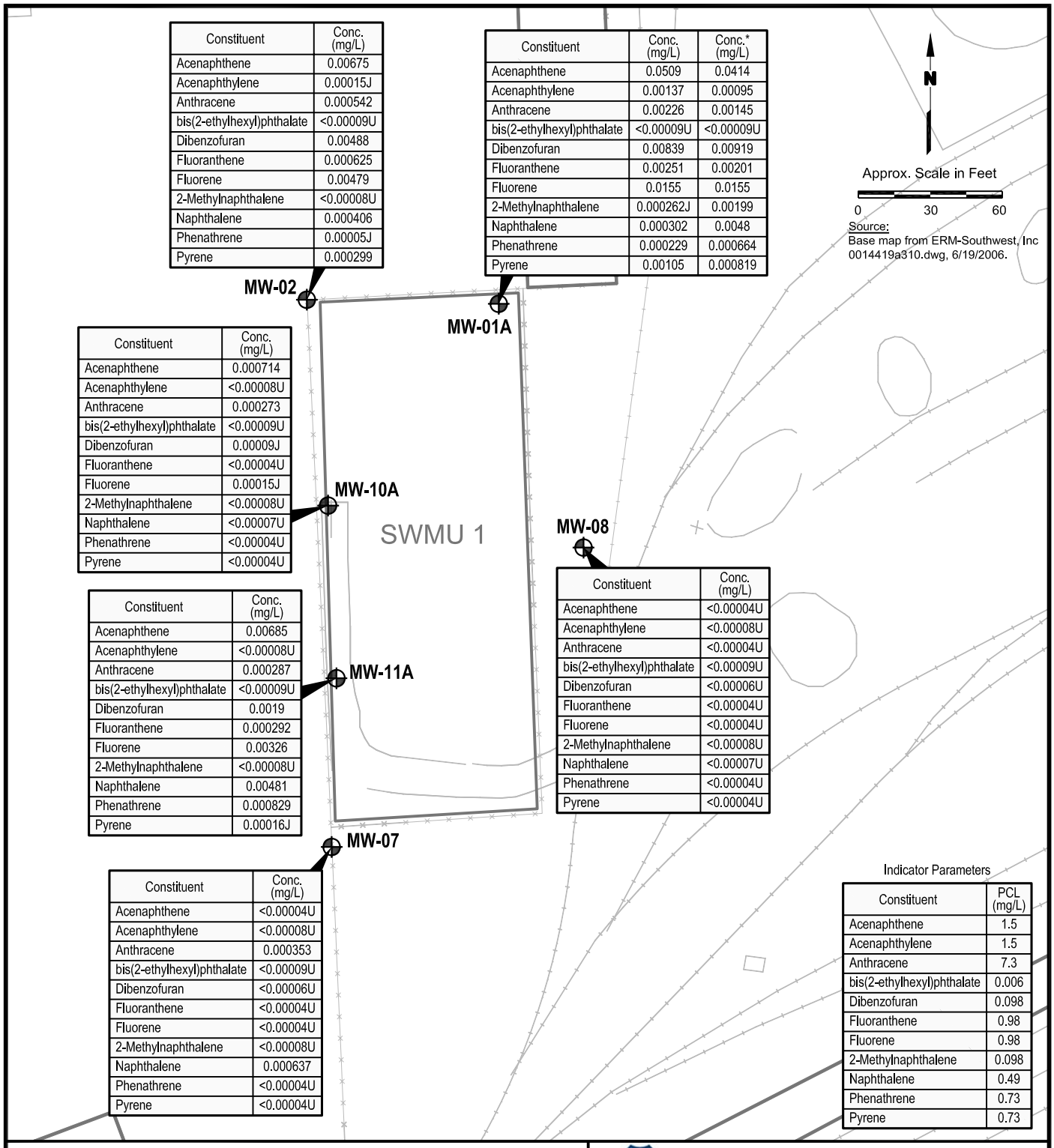

Constituent	Conc. (mg/L)
Acenaphthene	0.00675
Acenaphthylene	0.00015J
Anthracene	0.000542
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	0.00488
Fluoranthene	0.000625
Fluorene	0.00479
2-Methylnaphthalene	<0.00008U
Naphthalene	0.000406
Phenathrene	0.00005J
Pyrene	0.000299

Constituent	Conc. (mg/L)	Conc.* (mg/L)
Acenaphthene	0.0509	0.0414
Acenaphthylene	0.00137	0.00095
Anthracene	0.00226	0.00145
bis(2-ethylhexyl)phthalate	<0.00009U	<0.00009U
Dibenzofuran	0.00839	0.00919
Fluoranthene	0.00251	0.00201
Fluorene	0.0155	0.0155
2-Methylnaphthalene	0.000262J	0.00199
Naphthalene	0.000302	0.0048
Phenathrene	0.000229	0.000664
Pyrene	0.00105	0.000819

Constituent	Conc. (mg/L)
Acenaphthene	0.000714
Acenaphthylene	<0.00008U
Anthracene	0.000273
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	0.00009J
Fluoranthene	<0.00004U
Fluorene	0.00015J
2-Methylnaphthalene	<0.00008U
Naphthalene	<0.00007U
Phenathrene	<0.00004U
Pyrene	<0.00004U

Constituent	Conc. (mg/L)
Acenaphthene	0.00685
Acenaphthylene	<0.00008U
Anthracene	0.000287
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	0.0019
Fluoranthene	0.000292
Fluorene	0.00326
2-Methylnaphthalene	<0.00008U
Naphthalene	0.00481
Phenathrene	0.000829
Pyrene	0.00016J

Constituent	Conc. (mg/L)
Acenaphthene	<0.00004U
Acenaphthylene	<0.00008U
Anthracene	<0.00004U
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	<0.00006U
Fluoranthene	<0.00004U
Fluorene	<0.00004U
2-Methylnaphthalene	<0.00008U
Naphthalene	<0.00007U
Phenathrene	<0.00004U
Pyrene	<0.00004U

Constituent	Conc. (mg/L)
Acenaphthene	<0.00004U
Acenaphthylene	<0.00008U
Anthracene	0.000353
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	<0.00006U
Fluoranthene	<0.00004U
Fluorene	<0.00004U
2-Methylnaphthalene	<0.00008U
Naphthalene	0.000637
Phenathrene	<0.00004U
Pyrene	<0.00004U

Indicator Parameters

Constituent	PCL (mg/L)
Acenaphthene	1.5
Acenaphthylene	1.5
Anthracene	7.3
bis(2-ethylhexyl)phthalate	0.006
Dibenzofuran	0.098
Fluoranthene	0.98
Fluorene	0.98
2-Methylnaphthalene	0.098
Naphthalene	0.49
Phenathrene	0.73
Pyrene	0.73

EXPLANATION

- Fence
- Railroad
- A-TZ Monitoring Well Location

Notes:
1. * Duplicates sample taken at MW-1A.
2. Sample collected on January 22-23, 2007.
3. J= Estimated value between SQL and MDL.
4. U= Value not detected greater than the MDL.

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Figure 5

A-TZ REPORTED CONCENTRATIONS 2007 1st SEMI ANNUAL MONITORING EVENT

PROJECT: 1358	BY: ZGK	REVISIONS
DATE: JULY, 2007	CHECKED: ECM	

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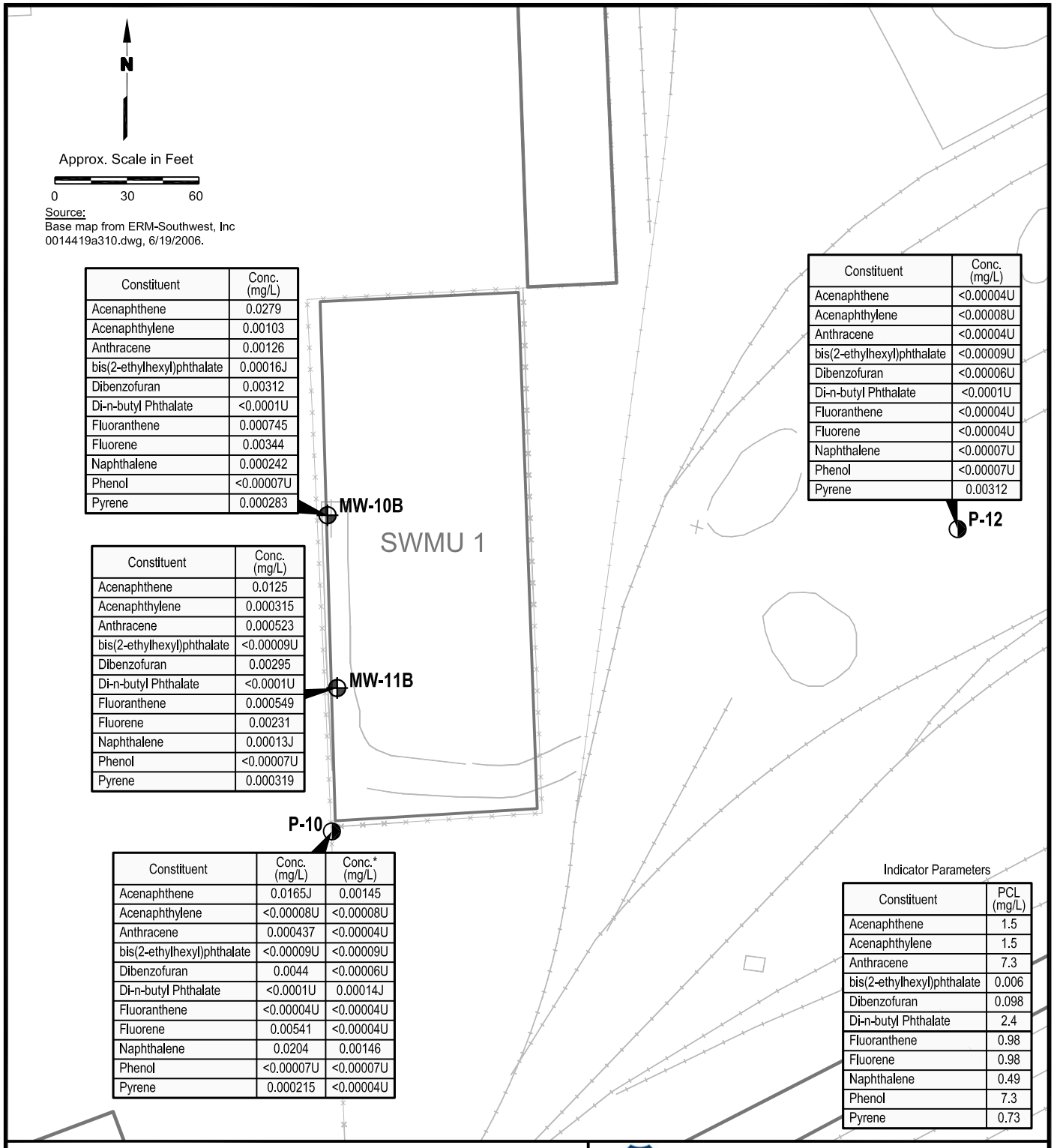

Constituent	Conc. (mg/L)
Acenaphthene	0.0279
Acenaphthylene	0.00103
Anthracene	0.00126
bis(2-ethylhexyl)phthalate	0.00016J
Dibenzofuran	0.00312
Di-n-butyl Phthalate	<0.0001U
Fluoranthene	0.000745
Fluorene	0.00344
Naphthalene	0.000242
Phenol	<0.00007U
Pyrene	0.000283

Constituent	Conc. (mg/L)
Acenaphthene	0.0125
Acenaphthylene	0.000315
Anthracene	0.000523
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	0.00295
Di-n-butyl Phthalate	<0.0001U
Fluoranthene	0.000549
Fluorene	0.00231
Naphthalene	0.00013J
Phenol	<0.00007U
Pyrene	0.000319

Constituent	Conc. (mg/L)	Conc.* (mg/L)
Acenaphthene	0.0165J	0.00145
Acenaphthylene	<0.00008U	<0.00008U
Anthracene	0.000437	<0.00004U
bis(2-ethylhexyl)phthalate	<0.00009U	<0.00009U
Dibenzofuran	0.0044	<0.00006U
Di-n-butyl Phthalate	<0.0001U	0.00014J
Fluoranthene	<0.00004U	<0.00004U
Fluorene	0.00541	<0.00004U
Naphthalene	0.0204	0.00146
Phenol	<0.00007U	<0.00007U
Pyrene	0.000215	<0.00004U

Constituent	Conc. (mg/L)
Acenaphthene	<0.00004U
Acenaphthylene	<0.00008U
Anthracene	<0.00004U
bis(2-ethylhexyl)phthalate	<0.00009U
Dibenzofuran	<0.00006U
Di-n-butyl Phthalate	<0.0001U
Fluoranthene	<0.00004U
Fluorene	<0.00004U
Naphthalene	<0.00007U
Phenol	<0.00007U
Pyrene	0.00312

Indicator Parameters

Constituent	PCL (mg/L)
Acenaphthene	1.5
Acenaphthylene	1.5
Anthracene	7.3
bis(2-ethylhexyl)phthalate	0.006
Dibenzofuran	0.098
Di-n-butyl Phthalate	2.4
Fluoranthene	0.98
Fluorene	0.98
Naphthalene	0.49
Phenol	7.3
Pyrene	0.73

EXPLANATION

- Fence
- Railroad
- B-TZ Monitoring Well Location
- Piezometer Location

Notes:
1. * Duplicates sample taken at P-10.
2. Sample collected on January 22-23, 2007.
3. J= Estimated value between SQL and MDL.
4. U= Value not detected greater than the MDL.

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Figure 6

B-TZ REPORTED CONCENTRATIONS 2007 1st SEMI ANNUAL MONITORING EVENT

PROJECT: 1358	BY: ZGK	REVISIONS
DATE: July, 2007	CHECKED: ECM	

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APPENDIX A
COMPLIANCE PLAN TABLES

TABLE IV - CORRECTIVE ACTION PROGRAM
Table of Indicator Parameters and Concentration Limits for
the Ground-Water Protection Standard

Closed Surface Impoundment (NOR Unit No. 001, SWMU No. 01)

A-Transmissive Zone		B-Transmissive Zone	
COLUMN A Hazardous Constituents	COLUMN B Concentration Limits (mg/l)	COLUMN A Hazardous Constituents	COLUMN B Concentration Limits (mg/l)
Acenaphthene	1.5[PCL]	Acenaphthene	1.5[PCL]
Acenaphthylene	1.5[PCL]	Acenaphthylene	1.5[PCL]
Anthracene	7.3[PCL]	Anthracene	7.3[PCL]
Dibenzofuran	0.098[PCL]	Dibenzofuran	0.098[PCL]
Bis(2-ethylhexyl)phthalate	0.006[PCL]	Bis(2-ethylhexyl)phthalate	0.006[PCL]
Fluoranthene	0.98[PCL]	Fluoranthene	0.98[PCL]
Fluorene	0.98[PCL]	Fluorene	0.98[PCL]
2-Methylnaphthalene	0.098[PCL]	Di-n-butyl phthalate	2.4[PCL]
Naphthalene	0.49[PCL]	Naphthalene	0.49[PCL]
Phenanthrene	0.73[PCL]	Phenol	7.3[PCL]
Pyrene	0.73[PCL]	Pyrene	0.73[PCL]

PCL Alternate Concentration Limit pursuant to 30 TAC §335.160(b) based upon the Protective Concentration Level determined under Remedy Standard A or B of 30 TAC Chapter 350. The PCL value, Column B, will change as updates to the rule are promulgated. Changes to the rule automatically change the concentration value established in Column B in this table.

TABLE V
Designation of Wells by Function

POINT OF COMPLIANCE WELLS

1. Closed Surface Impoundment (NOR Unit No. 001, SWMU No. 01)
A-Transmissive Zone: MW-01A, MW-02, MW-07, MW-10A, and MW-11A
B-Transmissive Zone: MW-10B, MW-11B, and P-10

POINT OF EXPOSURE WELLS

1. Closed Surface Impoundment (NOR Unit No. 001, SWMU No. 01)
None

BACKGROUND WELLS

1. Closed Surface Impoundment (NOR Unit No. 001, SWMU No. 01)
A-Transmissive Zone: MW-8
B-Transmissive Zone: P-12

Note: Wells and piezometers identified on Attachment A maps that are not listed in this table are subject to change, upon approval by the executive director, without modification to the Compliance Plan. The wells and piezometers for the Closed Surface Impoundment are depicted on Attachment A, Sheets 3 and 4.

APPENDIX B
FIELD PARAMETERS

TABLE B-1
Groundwater Sampling Field Parameters
Semiannual Monitoring Report: 2007 First Semiannual Event

Houston Wood Preserving Works
Houston, Texas

Field Parameter	Monitoring Well IDs (Concentrations mg/L)									
	A-Transmissive Zone						B-Transmissive Zone			
	MW-01A	MW-02	MW-07	MW-08	MW-10A	MW-11A	MW-10B	MW-11B	P-10	P-12
	1/23/2007	1/23/2007	1/23/2007	1/22/2007	1/23/2007	1/23/2007	1/23/2007	1/23/2007	1/23/2007	1/22/2007
Time Sampled (hrs CST)	15:25	14:10	10:10	17:40	13:00	8:10	11:15	7:20	9:10	16:45
Temperature (°C)	15.3	15.9	15.6	15.9	15.6	16.8	16.1	16.5	15.4	17.6
pH (Standard Units)	6.73	7.06	7.22	7.29	7.21	6.94	7.32	7.08	7.49	6.94
Specific Conductivity (µS)	1,318	399	746	616	889	992	1,136	1,074	1,015	1,346
Dissolved Oxygen (mg/L)	1.17	1.60	1.30	1.15	1.64	1.07	0.73	1.30	1.05	0.32
Turbidity (NTU)	7.6	4.30	4.7	2.2	8.1	6.9	5.4	2.1	7.5	3.6

APPENDIX C
LABORATORY ANALYTICAL REPORTS and DATA USABILITY SUMMARIES

SITE:	Union Pacific Railroad Company (UPRR) Houston Wood Preserving Works Houston, Texas (PBW Project No. 1358)
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW)
EVENT:	Semi-Annual Compliance Monitoring – January 2007 (1H07)
INTENDED USE:	Ten groundwater samples from background and compliance wells were collected during a semi-annual monitoring event from the closed surface impoundment SWMU No. 1. The analytical data will be used to monitor chemicals of concern (COCs) in the groundwater that have been identified during past investigations and to evaluate whether migration of COCs could result in a risk to human or ecological health.
LABORATORY:	Severn Trent Laboratories, Inc. (Houston, TX) SDG Nos: 329230
PARAMETERS/METHODS:	Semivolatile Organics (SVOC) SW-846 3510C/ 8270C
SAMPLES:	Ten groundwater samples Two field duplicates One matrix spike/matrix spike duplicate (MS/MSD) pair One field blank (See Table 1 for a complete listing of samples and target analytes.)

PBW prepared a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, *Review and Reporting of COC Concentration Data* (RGG-366/TRRP-13) and adherence to project objectives. The results of the review are discussed in this Data Usability Summary (DUS).

All samples collected during the event were included in the review. PBW completed the review using the following laboratory submittals and project data:

- the laboratory reportable data as defined in TRRP-13;
- the Laboratory Review Checklists (LRCs) and associated exception reports;
- the laboratory Electronic Data Deliverables (EDDs), which are spreadsheets containing results for all investigative and field QC samples; and
- the field notes on sampling activities.

The review of the reportable data included the Quality Control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field Blanks
- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory, Matrix, and Field Duplicate Precision

Additionally, PBW used the LRCs to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration and Performance
- Internal Standards

No project specific criteria have been specified for this site and thus the reviewer selected appropriate criteria as follows:

- Organics: 60-140% spike recovery (but not less than 10%) and 40% RPD (for laboratory duplicates) as recommended in TRRP-13
- Aqueous Samples: $\pm$ 2 x MQL difference or 30% RPD (for field duplicates)

The results of the review are summarized in Table 2, which lists all of the qualified sample results. All data usability qualifiers (DUQs) and the reason for qualification were added to the EDDs (320110wQAA.xls and 320124wQAA.xls). The checklists used by the reviewer are included as Attachment 1.

USABILITY SUMMARY

1. Usability Of Unqualified Non-Detects – For all parameters, non-detects are reported as less than the Sample Quantitation Limit (SQL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each target analyte and the MDLs were checked for reasonableness. The Levels of Required Performance (LORPs) for the site have been defined by PBW as the Tier 1 Protective Concentration Levels (PCLs), $^{GW}GW_{Ing}$, for residential land use. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP and thus the results can be used to demonstrate conformance with critical PCLs.
2. Usability Of Qualified Data – There are no major QC deficiencies and thus all data is usable for the intended use. Data for various analytes is qualified as estimated (J or UJ) or biased low (JL or UJL) due to minor QC deficiencies (see Table 2). Results that are biased low can be used for determining the presence of the analyte and as an indication that the concentration of the analyte exceeds a given criterion. However, the concentration reported for detects or the SQL for non-detects may be low. Results that are biased high can be used for determining the presence of the analyte and as an indication that the concentration of the analyte is less than a given criterion. However, the concentration reported for detects may be high. Similarly, results that are estimated may be either low or high.

PBW Reviewer: Jennifer Pavesi (Name/Signature) 2/14/07 (Date)

QC PARAMETER	QC OUTCOME
Chain-of-Custody	Proper sample custody procedures were followed. This confirms that the integrity of the samples was maintained.
Sample Condition	Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation.
Field Procedures	Wells were inspected and gauged and then purged and sampled using a low-flow technique (less than 0.5 liters per minute) and dedicated tubing. Field instruments were calibrated daily. All samples were immediately put on ice and kept on ice until delivered to the laboratory. Two field duplicates (one for each transmissive zone), one MS/MSD pair, and one field blank were collected with the ten investigative samples. Readings for pH, temperature, turbidity, dissolved oxygen, and specific conductivity were recorded and wells were purged until the well conditions stabilized (i.e., no parameter measurement varied by more than 10% between two consecutive readings).
Results Reporting	The analytical results (in the hardcopy report and EDD) include a Result, MDL, MQL, and SQL. The MQL is unadjusted, i.e., does not include correction for sample-specific actions such as dilution. Results are reported in mg/L. As required per TRRP, results for non-detects are reported as less than the SQL. The laboratory qualified results for detects between the SQL and the MQL with a J-flag to indicate that the concentration is estimated. The DUQ includes a flag for the concentration being below the MQL plus any other QC deficiencies.
MQLs	The LORPs for the site are defined as the Tier 1 Protective Concentration Levels (PCLs) for residential land use and a Class 2 groundwater resource (i.e., the $^{GW}GW_{Ing}$ in TCEQ Table 3 dated March 31, 2006). For each requested analyte, the unadjusted MQLs are at or below the LORPs.
MDLs	According to the LRC, an MDL study was performed for each target analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of Detectability Check Standards (DCSs) as required per TRRP-13.
Laboratory Blanks	The laboratory blank concentrations for batch 170659 were all non-detect which indicates that the samples were not affected by laboratory contamination.
Field Blanks	Field Blank concentrations were all non-detect.
Laboratory Control Spike Recovery	For all parameters, the laboratory prepared one Laboratory Control Spike (LCS) for the analytical batch and reported the recoveries for all target analytes. The recoveries are within the recommended TRRP limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.
Matrix Spike Recovery	The laboratory prepared a Matrix Spike (MS) and Matrix Spike Duplicate (MSD) using a sample from the site for both analytical batches and reported recoveries for

all target analytes. The average recoveries for both MS/MSD pairs are within the recommended TRRP limits, which indicates good accuracy for the preparation/ analysis technique on this particular sample matrix.

Surrogate Recovery

Recoveries are within the laboratory limits, which indicates that the accuracy of the preparation and analysis technique is acceptable for each particular sample.

Laboratory Duplicate Precision

The laboratory did not prepare Laboratory Control Spike Duplicates (LCSD) as they are not required per the analytical methods or TRRP. The reviewer used the matrix and field duplicates to assess precision.

Matrix Duplicate Precision

The laboratory prepared a MSD using a sample from the site for the analytical batch and reported RPDs for all target analytes. The RPDs are all within the recommended TRRP limit, which indicates good precision for the preparation and analysis technique on this particular sample matrix.

Field Duplicate Precision

Two field duplicates were collected with the ten investigative samples. RPDs (or the difference between results for concentrations <5xMQL and non-detects) are within the TRRP criteria for all target analytes, which indicates good precision for the collection, preparation, and analysis techniques on this particular sample matrix, except as follows:

Collection Date	Parent Sample ID	Analyte	RPD
1/23/2007	MW-01A	Acenapthylene	36
1/23/2007	MW-01A	Anthracene	44
1/23/2007	MW-01A	2-Methylnapthalene	153
1/23/2007	MW-01A	Napthalene	176
1/23/2007	MW-01A	Phenanthrene	97
1/23/2007	P-10	Acenaphthene	168
1/23/2007	P-10	Napthalene	173

The reviewer qualified all detects in the associated samples (collected on the same date) as estimated (J).

GCMS Tuning

According to the LRCs, tuning data met the criteria for ion abundance in the analytical method.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements. This indicates the instruments were properly calibrated to measure target analyte concentrations.

Internal Standards

According to the LRCs, area counts and retention times were within method requirements with the exception of sample 329230-5 (P-10) which were below the acceptance limits of =/-50%.

TABLE 1
UPRR HOUSTON WOOD PRESERVING WORKS
SEMI-ANNUAL COMPLIANCE MONITORING – JANUARY 2007

SAMPLES COLLECTED

LABORATORY ID	SAMPLE ID	SAMPLE MATRIX	SAMPLE DATE	ANALYTE LIST	QC BATCH
329230-1	P-12	water	1/22/2007	B	170659
329230-2	MW-08	water	1/22/2007	A	170659
329230-3	MW-11B	water	1/23/2007	B	170659
329230-4	MW-11A	water	1/23/2007	A	170659
329230-5	P-10	water	1/23/2007	B	170659
329230-6	P-101(1)	water	1/23/2007	B	170659
329230-7	MW-07	water	1/23/2007	A	170659
329230-8	MW-10B	water	1/23/2007	B	170659
329230-9	MW-10A	water	1/23/2007	A	170659
329230-10	MW-02	water	1/23/2007	A	170659
329230-11	MW-01A	water	1/23/2007	A	170659
329230-12	MW-01B(2)	water	1/23/2007	A	170659
329230-13	FB-1(3)	water	1/23/2007	A & B	170659
329230-15	MW-10A MS	water	1/23/2007	A & B	170659
329230-16	MW-10A MSD	water	1/23/2007	A & B	170659

(1) Field duplicate of P-10
(2) Field duplicate of MW-01A
(3) Field blank

TARGET ANALYTES

A-Transmissive Zone (A list)	B-Transmissive Zone (B list)
2-Methylnaphthalene	Acenaphthene
Acenaphthene	Acenaphthylene
Acenaphthylene	Anthracene
Anthracene	bis(2-ethylhexyl)phthalate
bis(2-ethylhexyl)phthalate	Dibenzofuran
Dibenzofuran	Di-n-butyl Phthalate
Fluoranthene	Fluoranthene
Fluorene	Fluorene
Naphthalene	Naphthalene
Phenanthrene	Phenol
Pyrene	Pyrene

TABLE 2
UPRR HOUSTON WOOD PRESERVING WORKS
SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2006

QUALIFIED SAMPLE RESULTS

SAMPLE(S)	ANALYTE(S)	QUALIFIER	REASON
MW-01A	Acenapthylene	J	poor field duplicate precision (36 RPD)
MW-01A	Anthracene	J	poor field duplicate precision (44 RPD)
MW-01A	2-Methylnapthalene	J	poor field duplicate precision (153 RPD)
MW-01A	Napthalene	J	poor field duplicate precision (176 RPD)
MW-01A	Phenanthrene	J	poor field duplicate precision (97 RPD)
MW-01B (DUP)*	Acenapthylene	J	poor field duplicate precision (36 RPD)
MW-01B (DUP)*	Anthracene	J	poor field duplicate precision (44 RPD)
MW-01B (DUP)*	2-Methylnapthalene	J	poor field duplicate precision (153 RPD)
MW-01B (DUP)*	Napthalene	J	poor field duplicate precision (176 RPD)
MW-01B (DUP)*	Phenanthrene	J	poor field duplicate precision (97 RPD)
MW-02	Acenapthylene	J	result is between the SQL and MQL
MW-02	Phenanthrene	J	result is between the SQL and MQL
MW-10A	Dibenzofuran	J	result is between the SQL and MQL
MW-11A	Pyrene	J	result is between the SQL and MQL
MW-10B	Bis(2-ethylhexyl)phthalate	J	result is between the SQL and MQL
MW-11B	Napthalene	J	result is between the SQL and MQL
P-10	Acenaphthene	J	poor field duplicate precision (168 RPD)
P-10	Anthracene	J	poor field duplicate precision (DUP < SQL)
P-10	Dibenzofuran	J	poor field duplicate precision (DUP < SQL)
P-10	Fluorene	J	poor field duplicate precision (DUP < SQL)
P-10	Napthalene	J	poor field duplicate precision (173 RPD)
P-10	Pyrene	J	poor field duplicate precision (DUP < SQL)
P-101 (DUP)*	Acenaphthene	J	poor field duplicate precision (168 RPD)
P-101 (DUP)*	Anthracene	UJ	analyte not detected above the SQl; poor field duplicate precision (DUP < SQL)
P-101 (DUP)*	Dibenzofuran	UJ	analyte not detected above the SQl; poor field duplicate precision (DUP < SQL)
P-101 (DUP)*	Fluorene	UJ	analyte not detected above the SQl; poor field duplicate precision (DUP < SQL)
P-101 (DUP)*	Napthalene	J	poor field duplicate precision (173 RPD)
P-101 (DUP)*	Pyrene	UJ	analyte not detected above the SQl; poor field duplicate precision (DUP < SQL)
P-101 (DUP)*	Di-n-butyl phthalate	J	result is between the SQL and MQL

TABLE 2
UPRR HOUSTON WOOD PRESERVING WORKS
SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2006

QUALIFIED SAMPLE RESULTS

SAMPLE(S)	ANALYTE(S)	QUALIFIER	REASON

* field duplicate

U – Blank affected; The analyte was not detected above 5x (10x for common contaminants) the level in an associated blank.
UJ – Estimated data; The analyte was not detected above the reported sample quantitation limit (SQL) however, the SQL is approximate due to exceedance of one or more QC requirements.
J – Estimated data; The reported sample concentration is approximate due to exceedance of one or more QC requirements.
R – Rejected data; Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.
H – Bias in sample result is likely to be high
L – Bias in sample result is likely to be low

NOTE: For multiple deficiencies, the reviewer applied the most severe flag. (R>U>J>JL/JH and R>UJ>UJL)

ATTACHMENT 1
REVIEWER CHECKLISTS

Data Usability Review Checklist

Site Name: UPRR HWPW	Project Number: 1358
Laboratory: STL Houston	Project Manager: Eric Matzner
Reviewer: Jennifer Pavesi	Laboratory Job No: 329230
Parameters: SVOC	Date Checked: 2/14/07
	Methods: 3510C/ 8270C

ITEM	YES	NO	N/A	COMMENTS
Signed Cover Page included?	x			
R1 Date of sample collection included?	x			
R1 Sample temp (2-6 C)?	x			
R1 COCs properly executed *and seals used?*	x			
R1 *Samples rec'd within 2 days of collection?*	x			
R2 Field, Laboratory, and Batch ID included?	x			
R3 Date of analysis included?	x			
R3 Date of sample preparation included?	x			
R3 *NDs at SQL and* MQLs included?	x			MQLs are unadjusted, i.e. no dil correction
R3 Holding time to analysis not expired?	x			SVOC - 40 days
R3 Holding time to preparation not expired?	x			SVOC - 7 days
R3 Met Method Quantitation Limits?	x			some TAs reported from dilution due to high conc (NDs at no dilution)
R3 Method references included?	x			
R3 Sample matrix included?	x			
R3 Sample results included?	x			
R3 Soils on dry weight?			x	
R9 Evaluate unadjusted MQLs? *(<LORPs)*	x			
R10 *LRC covers all necessary items?*	x			
R10 Case narrative included, where required *(QC deficiency or elev SQL for 350.51,.79)?*	x			
S10 MDLs reasonable per DCS or LCS?	x			per LRC (used DCS not LCS)
FN1 Field instruments calibrated daily?	x			
FN2 Well conditions constant before sampling?	x			
FN3 Containers and preservative appropriate?	x			(SVOC G, 4 C)
FN4 Samples filtered? If so, give turbid/size		x		
FN5 Sampling sequence from low to high conc?			x	dedicated tubing

Definitions: AA - Atomic Absorption; %D - Percent Difference, ICP - Inductively Coupled Plasma; IDL - Instrument Detection Limit; MDL - Method Detection Limit; %R - Percent Recovery; RF - Response Factor; RPD - Relative Percent Difference; RRT - Relative

COMMENTS:

Data Usability Review Checklist: GC/MS

Client Name: Pastor, Behling & Wheeler, LLC	Project Number: 1358
Site Name: UPRR HWPW	Project Manager: Eric Matzner
Laboratory: STL Houston	Laboratory Job No: 320110, 320124
Reviewer: Jennifer Pavesi	Date Checked: 12/1/06
	Methods: 3510C/ 8270C

	ITEM	YES	NO	N/A	COMMENTS
R4	Surrogate data included in lab package?	x			
	Required surrogates included?	x			
	%R criteria met? (*lab limits below*) Reject <10%	x			
	Area within limits? (within -50/+100% of last calib chk)?			x	
	RRT within limits? (<30 sec diff from last calib chk?)			x	
R5	Method blank data included in Lab Package?	x			
	Criteria met? (*<MDL*)	x			
	Criteria met for field blanks? (<MDL)	x			
R6	QC check samples/LCS data included in lab package?	x			
	all project COCs or TAs included?	x			
	%R criteria met? (*TRRP 60-140%*) Reject <10%	x			
	RPD criteria met? (*TRRP 40%*)			x	
R7	Matrix spike data included in lab package?	x			
	%R criteria met? (*TRRP 60-140%*) Reject <10%	x			
	RPD criteria met? (*TRRP 40%*)	x			
	Field dup RPD criteria met? (TRRP 50%sol, 30%aq, diff)		x		
S1	Initial calibration documentation included in lab package?		x		
	all target analytes included?	x			per LRC
	RRF met SPCCs/*TAs(0.05/0.01)*? *SPCC* RRF<0.05 reject	x			per LRC
	%RSD criteria met for CCCs/*TAs*? (<30% RSD for CCC, >15% RSD must have fit)	x			per LRC
S2	Calibration verification data included in lab package?		x		
	RRF met SPCCs/*TAs(0.05/0.01)*? *SPCC* RRF<0.05 reject	x			per LRC
	%D criteria met for CCC/*TAs*? (20% Max, Qualify >25%D)	x			per LRC
S3	Instrument Tune for GC/MS included in lab package?		x		
S4	Internal standard data included in lab package?		x		
	Areas within limits (within -50/+100% of last calib check)?	x			per LRC
	RTs within limits (<30 sec diff from last calib check)?	x			per LRC

R4	Surrogate	Control Limits				
	246TBP	10-123				
	2FBP	43-116				
	2FP	21-100				
	d5NB	35-114				
	d6PH	10-94				
	d14TERP	33-141				

COMMENTS

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ANALYTICAL REPORT

JOB NUMBER: 329280
Project ID: UPRR HWPW 1358

Prepared For:

Pastor, Behling & Wheeler, LLC
2201 Double Creek Drive
Suite 4004
Round Rock, TX 78664

Attention: Eric Matzner

Date: 02/06/2007

Signature

02/07/07
Date

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: skudchadkar@stl-inc.com

Severn Trent Laboratories
6310 Rothway Drive
Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES 36

SEVERN TRENT STL

02/06/2007

Eric Matzner
Pastor, Behling & Wheeler, LLC
2201 Double Creek Drive
Suite 4004
Round Rock, TX 78664

Reference:
Project : UPRR HWPW 1358
Project No. : 329230
Date Received : 01/23/2007
STL Job : 329230

Dear Eric Matzner:

Enclosed are the analytical results for your project referenced above. The following samples are included in the report.

1. P-12
2. MW-08
3. MW-11B
4. MW-11A
5. P-10
6. P-101
7. MW-07
8. MW-10B
9. MW-10A
10. MW-02
11. MW-01A
12. MW-01B
13. FB-1
15. MW-10A MS
16. MW-10A MSD

All holding times were met for the tests performed on these samples.

Enclosed, please find the Quality Control Summary. All quality control results for the QC batch that are applicable to the sample(s) are acceptable except as noted in the QC batch reports.

The test results in this report meet all NELAP requirements for STL Houston's NELAP accredited parameters. Any exceptions to NELAP requirements will be noted and included in a case narrative as a part of this report.

If the report is acceptable, please approve the enclosed invoice and forward it for payment.

Thank you for selecting Severn-Trent Laboratories to serve as your analytical laboratory on this project. If you have any questions concerning these results, please feel free to contact me at any time.

We look forward to working with you on future projects.

Sincerely,

Sachin G. Kudchadkar
Project Manager

SEVERN TRENT STL

Table 1

Cross-Reference Field Sample Identifications and Laboratory Identifications

Field Identification	Laboratory Identification	8270C	Comment
P-12	329230-1	X	
MW-08	329230-2	X	
MW-11B	329230-3	X	
MW-11A	329230-4	X	
P-10	329230-5	X	
P-101	329230-6	X	
MW-07	329230-7	X	
MW-10B	329230-8	X	
MW-10A	329230-9	X	
MW-02	329230-10	X	
MW-01A	329230-11	X	
MW-01B	329230-12	X	
FB-1	329230-13	X	Field Blank
MW-10A MS	329230-15	X	Matrix Spike of MW-10A
MW-10A MSD	329230-16	X	Matrix Spike Duplicate of MW-10A

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Appendix A Laboratory Data Package Cover Page

This data package consists of:

- This signature page, the laboratory review checklist, and the following reportable data:
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
  b) dilution factors,
  c) preparation methods,
  d) cleanup methods, and
  e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
  a) Calculated recovery (%R), and
  b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  a) LCS spiking amounts,
  b) Calculated %R for each analyte, and
  c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a) Samples associated with the MS/MSD clearly identified,
  b) MS/MSD spiking amounts,
  c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d) Calculated %Rs and relative percent differences (RPDs), and
  e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  a) the amount of analyte measured in the duplicate,
  b) the calculated RPD, and
  c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.
- The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By me signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [ ] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Norman Flynn		Laboratory Director	2007-02-07
Name (Printed)	Signature	Official Title (printed)	Date

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: STL-Houston	LRC Date: 01/31/07
Project Name: UPRR HWPW 1358	Laboratory Job Number: 329230
Reviewer Name: KRI	Prep Batch Number(s): 170470-SV

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?			X		
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		If required for the project, TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SQL to minimize the matrix interference affects on the sample results?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: STL-Houston	LRC Date: 01/31/07
Project Name: UPRR HWPW 1358	Laboratory Job Number: 329230
Reviewer Name: KRI	Prep Batch Number(s): 170470-SV

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICCV and CCV) and continuing calibration**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning:**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS):**					
		Were IS area counts and retention times within the method-required QC limits?		X			1
S5	OI	**Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17025 section**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs):**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results:**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports:**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods** (NELAC Chap 5 or ISO/IEC 17025 Section					
		Are all the methods used to generate the data documented, verified, and validated, where	X				
S16	OI	**Laboratory standard operating procedures (SOPs):**					
		Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
3 NA = Not applicable.
4 NR = Not Reviewed.
5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: STL-Houston	LRC Date: 01/31/07
Project Name: UPRR HWPW 1358	Laboratory Job Number: 329230
Reviewer Name: KRI	Prep Batch Number(s): 170470-SV

ER #[1]	DESCRIPTION
1	All internal standard areas in sample 329230-5 were below the in-house acceptance limits of +/- 50%. Per method SW846-8270C requirements, no corrective action was necessary.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

SEVERN TRENT STL®

No. 024885

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: PASTOR, BEHLING & WHEELER	PROJECT NAME/NUMBER: LRR - HW PW - 1358
SEND REPORT TO: ERIC MATZNER	BILLING INFORMATION
ADDRESS: 2201 DOUBLE CREEK DR #4004	BILL TO: GEOFFREY REEDER
ROUND ROCK, TX 78664	ADDRESS: 24125 ALDINE WESTFIELD
	SPRING, TX 77373
PHONE: 512-671-3434	PHONE: 281-350-7197
FAX: 512-671-3446	FAX: 281-350-7362 PO NO:

LAB JOB NO. 329230

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: 8270 LOW LEVEL A-TZ COC	8270 LOW LEVEL B-TZ COC LIST	REMARKS/PRECAUTIONS
	P-12	1/22/07	1645	W	1L AMBER	NONE	2		X	(R) SEE ATTACHED LIST
	MW-08	1/22/07	1740	W	1L AMBER	NONE	2	X		
	MW-11B	1/23/07	0720	W	1L-AMBER	NONE	2		X	
	MW-11A	1/23/07	0810	W	1L-AMBER	NONE	2	X		
	P-10	1/23/07	0910	W	1L-AMBER	NONE	2		X	
	P-101	1/23/07	0855	W	1L-AMBER	NONE	2		X	
	MW-07	1/23/07	1010	W	1L-AMBER	NONE	2	X		
	MW-10B	1/23/07	1115	W	1L-AMBER	NONE	2		X	
	MW-10A	1/23/07	1300	W	1L-AMBER	NONE	2	X		
	MW-02	1/23/07	1410	W	1L-AMBER	NONE	2	X		

SAMPLER: JOHN BRAYTON SHIPMENT METHOD: HAND DELIVERED AIRBILL NO.:

REQUIRED TURNAROUND* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☒ ROUTINE ☐ OTHER

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE:	1/23/07	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: JOHN BRAYTON / PBW	TIME 1714	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:	1-23-7	SIGNATURE:	1/23/07	SIGNATURE:	
PRINTED NAME/COMPANY: STL	TIME 1714	PRINTED NAME/COMPANY: STL	TIME 1714	PRINTED NAME/COMPANY:	TIME

*RUSH TURNAROUND MAY REQUIRE SURCHARGE

STL8222H-600 (0803)

STL Houston
6310 Rothway Drive
Houston, TX 77040

SEVERN TRENT STL®

No. 024886

CHAIN OF CUSTODY RECORD

CUSTOMER INFORMATION	PROJECT INFORMATION
COMPANY: PBW	PROJECT NAME/NUMBER: DPER - HWPW - 1358
SEND REPORT TO: ERIC MATZNER	**BILLING INFORMATION**
ADDRESS: 2201 DOUBLE CREEK DR #4004	BILL TO: GEOFFREY REEDER
Round Rock, TX 78664	ADDRESS: 24125 ALDINE WESTFIELD
	SPRING, TX 77373
PHONE: 512-671-3434	PHONE: 281-350-7197
FAX: 512-671-3446	FAX: 281-350-7362 PO NO:

LAB JOB NO. 329230

SAMPLE NO.	SAMPLE DESCRIPTION	SAMPLE DATE	SAMPLE TIME	SAMPLE MATRIX	CONTAINER	PRESERV.	NUMBER OF CONTAINERS	ANALYSIS/METHOD REQUEST: 8270 - LOW LEVEL - A-TZ ROCKS	8270 LOW LEVEL B-TZ ROCKS	REMARKS/PRECAUTIONS
	MW-01A	1/23/07	1525	W	IL-AMBER	NONE	2	X		(R) SEE ATTACHED LIST
	MW-01B	1/23/07	1515	W	IL-AMBER	NONE	2	X		
	FB-1	1/23/07	1540	W	IL-AMBER	NONE	2	X	X	
	MW-10A	1/23/07	1300	W	IL-AMBER	NONE	4	X	X	MS/MSD

SAMPLER: JOHN BEAUBIEN

SHIPMENT METHOD: HAND DELIVERED

AIRBILL NO.:

REQUIRED TURNAROUND* ☐ SAME DAY ☐ 24 HOURS ☐ 48 HOURS ☐ 72 HOURS ☐ 5 DAYS ☐ 10 DAYS ☒ ROUTINE ☐ OTHER _____

1. RELINQUISHED BY:	DATE	2. RELINQUISHED BY:	DATE	3. RELINQUISHED BY:	DATE
SIGNATURE: John Beaubien for	1/23/07	SIGNATURE:		SIGNATURE:	
PRINTED NAME/COMPANY: JOHN BEAUBIEN / PBW	TIME 1714	PRINTED NAME/COMPANY:	TIME	PRINTED NAME/COMPANY:	TIME
1. RECEIVED BY:	DATE	2. RECEIVED BY:	DATE	3. RECEIVED BY:	DATE
SIGNATURE:	1-23-07	SIGNATURE:	1/23/07	SIGNATURE:	
PRINTED NAME/COMPANY:	TIME 1714	PRINTED NAME/COMPANY: STL	TIME 1714	PRINTED NAME/COMPANY:	TIME

*RUSH TURNAROUND MAY REQUIRE SURCHARGE

STL8222H-600 (0803)

STL Houston
6310 Rothway Drive
Houston, TX 77040

Bottle Request for Groundwater Sampling
Houston Wood Preserving Works
Houston, TX

Quantity	Matrix	Container	Preservative	Analysis Request
6	ATZ Wells	2x1L	None	ATZ (See below)
4	BTZ Wells	2x1L	None	BTZ (See below)
1	Dup	2x1L	None	ATZ (See below)
1	Dup	2x1L	None	BTZ (See below)
1	Field Blank	2x1L	None	Field Blank/MS/MSD (See below)
1	MS	2x1L	None	Field Blank/MS/MSD (See below)
1	MSD	2x1L	None	Field Blank/MS/MSD (See below)

ATZ Well Groundwater Samples: MW-01A, MW-02, MW-07, MW-08, MW-10A, MW-11B - Analyze for the following:	BTZ Well Groundwater Samples: MW-10B, MW-11B, P-10, P-12 - Analyze for the following:	Field Blank/MS/MSD - Analyze for the following:
Acenaphthene	Acenaphthene	Acenaphthene
Acenaphthylene	Acenaphthylene	Acenaphthylene
Anthracene	Anthracene	Anthracene
bis(2-ethylhexyl)phthalate	bis(2-ethylhexyl)phthalate	bis(2-ethylhexyl)phthalate
Dibenzofuran	Dibenzofuran	Dibenzofuran
Fluoranthene	Di-n-butyl phthalate	Fluoranthene
Fluorene	Fluoranthene	Fluorene
2-Methylnaphthalene	Fluorene	2-Methylnaphthalene
Naphthalene	Naphthalene	Naphthalene
Phenanthrene	Phenol	Phenanthrene
Pyrene	Pyrene	Pyrene
		Phenol
		Di-n-butyl phthalate

P101
MW01B

rpjsckl | Job Sample Receipt Checklist Report | V2

Job Number.: 329230 Location.: 57216 Check List Number.: 1 Description.:
Customer Job ID.....: Job Check List Date.: 01/24/2007 Date of the Report..: 01/24/2007
Project Number.: 99000484 Project Description.: HWPW-0014419 Project Manager.....: sgk
Customer.....: Pastor, Behling & Wheeler, LLC Contact.: Eric Matzner

Questions ?	(Y/N)	Comments
Chain of Custody Received?	Y	
...If "yes", completed properly?	Y	
Custody seal on shipping container?	N	
...If "yes", custody seal intact?		
Custody seals on sample containers?	N	
...If "yes", custody seal intact?		
Samples chilled?	Y	
Temperature of cooler acceptable? (4 deg C +/- 2).	Y	3.1/2.8/4.7/5.1
...If "no", is sample an air matrix?(no temp req.)		
Thermometer ID	Y	464
Samples received intact (good condition)?	Y	
Volatile samples acceptable? (no headspace)		
Correct containers used?	Y	
Adequate sample volume provided?	Y	
Samples preserved correctly?	Y	
Samples received within holding-time?	Y	
Agreement between COC and sample labels?	Y	
Radioactivity at or below background levels?	Y	
Additional		
Comments		
Sample Custodian Signature/Date	Y	tfc

1/24/07

SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Taylor, Rollins & Wheeler, LLC | PROJECT: TRRP | ATTN: Eric Watzlaf

Customer Sample ID: P-12

Date/Time Sampled .....: 1/22/2007 16:45

Date/Time Received .....: 1/23/2007 17:14

Laboratory Sample ID: 329230-001

Sample Matrix .....: Water

TEST METHOD	CAS	RESULT	Q	LOQ	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:17	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:17	170656	1.00	dry
Anthracene	120-12-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:17	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 17:17	170656	1.00	dry
Dibenzofuran	132-64-9	0.0000600	U		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 17:17	170656	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000100	U		0.000110	0.000200	0.000100	mg/L	1/29/2007 17:17	170656	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:17	170656	1.00	dry
Fluorene	86-73-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:17	170656	1.00	dry
Naphthalene	91-20-3	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 17:17	170656	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 17:17	170656	1.00	dry
Pyrene	129-00-0	0.00312			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:17	170656	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler LLC   PROJECT: CLRR HWPW 1558   ATTN: Eric Matzner

Customer Sample ID: MW-08

Date/Time Sampled ....: 1/22/2007 17:40

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-002

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:45	170656	1.00	dry
Acenaphthene	83-32-9	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:45	170656	1.00	dry
Anthracene	120-12-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 17:45	170656	1.00	dry
Dibenzofuran	132-64-9	0.0000600	U		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 17:45	170656	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry
Fluorene	86-73-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry
Naphthalene	91-20-3	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 17:45	170656	1.00	dry
Phenanthrene	85-01-8	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry
Pyrene	129-00-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:45	170656	1.00	dry

Form I

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR - IWPW 1558 ATTN: Eric Matzner

Customer Sample ID: MW-11B

Date/Time Sampled ....: 1/23/2007 07:20

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-003

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAGS	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.0125			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:14	170656	1.00	dry
Acenaphthylene	208-96-8	0.000315			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:14	170656	1.00	dry
Anthracene	120-12-7	0.000523			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:14	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 18:14	170656	1.00	dry
Dibenzofuran	132-64-9	0.00295			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 18:14	170656	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000100	U		0.000110	0.000200	0.000100	mg/L	1/29/2007 18:14	170656	1.00	dry
Fluoranthene	206-44-0	0.000549			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:14	170656	1.00	dry
Fluorene	86-73-7	0.00231			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:14	170656	1.00	dry
Naphthalene	91-20-3	0.000130	J		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:14	170656	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:14	170656	1.00	dry
Pyrene	129-00-0	0.000319			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:14	170656	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230 Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR LWPW 1358 ATTN: Eric Matzner

Customer Sample ID: MW-11A
Date/Time Sampled ....: 1/23/2007 08:10
Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-004
Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:42	170656	1.00	dry
Acenaphthene	83-32-9	0.00685			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:42	170656	1.00	dry
Anthracene	120-12-7	0.000287			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 18:42	170656	1.00	dry
Dibenzofuran	132-64-9	0.00190			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 18:42	170656	1.00	dry
Fluoranthene	206-44-0	0.000292			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry
Fluorene	86-73-7	0.00326			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry
Naphthalene	91-20-3	0.00481			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:42	170656	1.00	dry
Phenanthrene	85-01-8	0.000829			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry
Pyrene	129-00-0	0.000160	J		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:42	170656	1.00	dry

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SEVERN TRENT **STL**

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 558 ATTN: Eric Matzner

Customer Sample ID: P-10

Date/Time Sampled ....: 1/23/2007 09:10

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-005

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.0165			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:11	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 19:11	170656	1.00	dry
Anthracene	120-12-7	0.000437			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:11	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 19:11	170656	1.00	dry
Dibenzofuran	132-64-9	0.00440			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 19:11	170656	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000100	U		0.000110	0.000200	0.000100	mg/L	1/29/2007 19:11	170656	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:11	170656	1.00	dry
Fluorene	86-73-7	0.00541			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:11	170656	1.00	dry
Naphthalene	91-20-3	0.0204			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:11	170656	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:11	170656	1.00	dry
Pyrene	129-00-0	0.000215			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:11	170656	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC | PROJECT: TRRP Review | ATTN: Eric Mathers

Customer Sample ID: P-101

Date/Time Sampled .....: 1/23/2007 08:55

Date/Time Received .....: 1/23/2007 17:14

Laboratory Sample ID: 329230-006

Sample Matrix .....: Water

TEST METHOD	CAS #	RESULT	Q	FAC	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.00145			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:39	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 19:39	170656	1.00	dry
Anthracene	120-12-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:39	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 19:39	170656	1.00	dry
Dibenzofuran	132-64-9	0.0000600	U		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 19:39	170656	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000140	J		0.000110	0.000200	0.000100	mg/L	1/29/2007 19:39	170656	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:39	170656	1.00	dry
Fluorene	86-73-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:39	170656	1.00	dry
Naphthalene	91-20-3	0.00146			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:39	170656	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:39	170656	1.00	dry
Pyrene	129-00-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:39	170656	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Easter, Bering & Wheeler, LLC | PROJECT: TRRP REVIEW 1358 | ATTN: Eric Merrell

Customer Sample ID: MW-07

Laboratory Sample ID: 329230-007

Date/Time Sampled .....: 1/23/2007 10:10

Sample Matrix .....: Water

Date/Time Received .....: 1/23/2007 17:14

TEST METHOD	CAS #	RESULT	Q	LAC	MDL	LOQ	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 20:08	170656	1.00	dry
Acenaphthene	83-32-9	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 20:08	170656	1.00	dry
Anthracene	120-12-7	0.000353			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 20:08	170656	1.00	dry
Dibenzofuran	132-64-9	0.0000600	U		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 20:08	170656	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry
Fluorene	86-73-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry
Naphthalene	91-20-3	0.000637			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 20:08	170656	1.00	dry
Phenanthrene	85-01-8	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry
Pyrene	129-00-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 20:08	170656	1.00	dry

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TRRP Laboratory Test Results

Job Number: 329230 | Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC | PROJECT: UPRR FWPW-1858 | ATTN: Eric Matzner

Customer Sample ID: MW-10B
Date/Time Sampled ....: 1/23/2007 11:15
Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-008
Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.0279			0.0000400	0.000200	0.0000800	mg/L	1/30/2007 15:01	170659	2.00	dry
Acenaphthylene	208-96-8	0.00103			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 15:55	170659	1.00	dry
Anthracene	120-12-7	0.00126			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 15:55	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.000160	J		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 15:55	170659	1.00	dry
Dibenzofuran	132-64-9	0.00312			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 15:55	170659	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000100	U		0.000110	0.000200	0.000100	mg/L	1/29/2007 15:55	170659	1.00	dry
Fluoranthene	206-44-0	0.000745			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 15:55	170659	1.00	dry
Fluorene	86-73-7	0.00344			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 15:55	170659	1.00	dry
Naphthalene	91-20-3	0.000242			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 15:55	170659	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 15:55	170659	1.00	dry
Pyrene	129-00-0	0.000283			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 15:55	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230   Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC   PROJECT: UPRR HWPW 1358   ATTN: Eric Matzner

Customer Sample ID: MW-10A   Laboratory Sample ID: 329230-009

Date/Time Sampled ....: 1/23/2007 13:00   Sample Matrix ....: Water

Date/Time Received ....: 1/23/2007 17:14

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 16:23	170659	1.00	dry
Acenaphthene	83-32-9	0.000714			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 16:23	170659	1.00	dry
Anthracene	120-12-7	0.000273			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 16:23	170659	1.00	dry
Dibenzofuran	132-64-9	0.0000900	J		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 16:23	170659	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry
Fluorene	86-73-7	0.000150	J		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry
Naphthalene	91-20-3	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 16:23	170659	1.00	dry
Phenanthrene	85-01-8	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry
Pyrene	129-00-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:23	170659	1.00	dry

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TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC   PROJECT: UPRR HWPW 1358   ATTN: Eric Matzner

Customer Sample ID: MW-02

Date/Time Sampled ....: 1/23/2007 14:10

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-010

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 16:52	170659	1.00	dry
Acenaphthene	83-32-9	0.00675			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry
Acenaphthylene	208-96-8	0.000150	J		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 16:52	170659	1.00	dry
Anthracene	120-12-7	0.000542			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 16:52	170659	1.00	dry
Dibenzofuran	132-64-9	0.00488			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 16:52	170659	1.00	dry
Fluoranthene	206-44-0	0.000625			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry
Fluorene	86-73-7	0.00479			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry
Naphthalene	91-20-3	0.000406			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 16:52	170659	1.00	dry
Phenanthrene	85-01-8	0.0000500	J		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry
Pyrene	129-00-0	0.000299			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 16:52	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC | PROJECT: TRRP TWP Wells | ATTN: Eric Matzner

Customer Sample ID: MW-01A

Date/Time Sampled .....: 1/23/2007 15:25

Date/Time Received .....: 1/23/2007 17:14

Laboratory Sample ID: 329230-011

Sample Matrix .....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.000262			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:21	170659	1.00	dry
Acenaphthene	83-32-9	0.0509			0.0000400	0.000200	0.000200	mg/L	1/30/2007 15:30	170659	5.00	dry
Acenaphthylene	208-96-8	0.00137			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:21	170659	1.00	dry
Anthracene	120-12-7	0.00226			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:21	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 17:21	170659	1.00	dry
Dibenzofuran	132-64-9	0.00839			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 17:21	170659	1.00	dry
Fluoranthene	206-44-0	0.00251			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:21	170659	1.00	dry
Fluorene	86-73-7	0.0155			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:21	170659	1.00	dry
Naphthalene	91-20-3	0.000302			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 17:21	170659	1.00	dry
Phenanthrene	85-01-8	0.000229			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:21	170659	1.00	dry
Pyrene	129-00-0	0.00105			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:21	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPV-158 ATTN: Eric Matzner

Customer Sample ID: MW-01B

Date/Time Sampled ....: 1/23/2007 15:15

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-012

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	1/25/2007 13:30	170470	1.00	mra
Method: SW-846 8270C, Water											
2-Methylnaphthalene	91-57-6	0.00199		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:50	170659	1.00	dry
Acenaphthene	83-32-9	0.0414		0.0000400	0.000200	0.000200	mg/L	1/30/2007 15:59	170659	5.00	dry
Acenaphthylene	208-96-8	0.000950		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 17:50	170659	1.00	dry
Anthracene	120-12-7	0.00145		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:50	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U	0.0000900	0.000200	0.0000900	mg/L	1/29/2007 17:50	170659	1.00	dry
Dibenzofuran	132-64-9	0.00919		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 17:50	170659	1.00	dry
Fluoranthene	206-44-0	0.00201		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:50	170659	1.00	dry
Fluorene	86-73-7	0.0155		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:50	170659	1.00	dry
Naphthalene	91-20-3	0.000480		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 17:50	170659	1.00	dry
Phenanthrene	85-01-8	0.000664		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:50	170659	1.00	dry
Pyrene	129-00-0	0.000819		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 17:50	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: PRC-HWPW-558[illegible] ATTN: Eric Matzner

Customer Sample ID: FB-1
Date/Time Sampled ....: 1/23/2007 15:40
Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-013
Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DIL	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor Behling & Wheeler, LLC | PROJECT: TRRP TWPW 1558 | ATTN: Eric Matzner

Customer Sample ID: FB-1

Laboratory Sample ID: 329230-013

Date/Time Sampled .....: 1/23/2007 15:40

Sample Matrix .....: Water

Date/Time Received .....: 1/23/2007 17:14

TEST METHOD	CAS	RESULT	LQ	FLAG	MDL	MQL	SQL	UNITS	Analysis Date	Batch	DF	Analyst
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:18	170659	1.00	dry
Acenaphthene	83-32-9	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry
Acenaphthylene	208-96-8	0.0000800	U		0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:18	170659	1.00	dry
Anthracene	120-12-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.0000900	U		0.0000900	0.000200	0.0000900	mg/L	1/29/2007 18:18	170659	1.00	dry
Dibenzofuran	132-64-9	0.0000600	U		0.0000600	0.000200	0.0000600	mg/L	1/29/2007 18:18	170659	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.000100	U		0.000110	0.000200	0.000100	mg/L	1/29/2007 18:18	170659	1.00	dry
Fluoranthene	206-44-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry
Fluorene	86-73-7	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry
Naphthalene	91-20-3	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:18	170659	1.00	dry
Phenanthrene	85-01-8	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry
Phenol	108-95-2	0.0000700	U		0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:18	170659	1.00	dry
Pyrene	129-00-0	0.0000400	U		0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:18	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230 | Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC | PROJECT: BPRP-HWPW 1358 | ATTN: Eric Matzner

Customer Sample ID: MW-10A MS
Date/Time Sampled ....: 1/23/2007 13:00
Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-015
Sample Matrix ....: Water

TEST METHOD	CAS	RESULT	Q FLAGS		MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230 Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR-HWPW Lex ATTN: Eric Matzner

Customer Sample ID: MW-10A MS
Date/Time Sampled ....: 1/23/2007 13:00
Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-015
Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.00810			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:47	170659	1.00	dry
Acenaphthene	83-32-9	0.00897			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry
Acenaphthylene	208-96-8	0.00785			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 18:47	170659	1.00	dry
Anthracene	120-12-7	0.00792			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.00747			0.0000900	0.000200	0.0000900	mg/L	1/29/2007 18:47	170659	1.00	dry
Dibenzofuran	132-64-9	0.00813			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 18:47	170659	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.00928			0.000110	0.000200	0.000100	mg/L	1/29/2007 18:47	170659	1.00	dry
Fluoranthene	206-44-0	0.00921			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry
Fluorene	86-73-7	0.00823			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry
Naphthalene	91-20-3	0.00782			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:47	170659	1.00	dry
Phenanthrene	85-01-8	0.00829			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry
Phenol	108-95-2	0.00337			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 18:47	170659	1.00	dry
Pyrene	129-00-0	0.00833			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 18:47	170659	1.00	dry

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SEVERN TRENT STL

TRRP Laboratory Test Results

Job Number: 329230 | Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler LLC | PROJECT: PRRHWPW 1358 | ATTN: Eric Matzner

Customer Sample ID: MW-10A MSD | Laboratory Sample ID: 329230-016
Date/Time Sampled ....: 1/23/2007 13:00 | Sample Matrix ....: Water
Date/Time Received ....: 1/23/2007 17:14

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						N/A	1/25/2007 13:30	170470	1.00	mra

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TRRP Laboratory Test Results

Job Number: 329230

Date: 2/6/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC | PROJECT: UPRR HWPW 1358 | ATTN: Eric Matzner

Customer Sample ID: MW-10A MSD

Date/Time Sampled ....: 1/23/2007 13:00

Date/Time Received ....: 1/23/2007 17:14

Laboratory Sample ID: 329230-016

Sample Matrix ....: Water

TEST METHOD	CAS #	RESULT	Q	FLAG	MDL	MQL	SQL	UNITS	Analysis Date/Time	Batch	DIL	Analyst
Method: SW-846 8270C, Water												
2-Methylnaphthalene	91-57-6	0.00829			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 19:15	170659	1.00	dry
Acenaphthene	83-32-9	0.00924			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry
Acenaphthylene	208-96-8	0.00824			0.0000800	0.000200	0.0000800	mg/L	1/29/2007 19:15	170659	1.00	dry
Anthracene	120-12-7	0.00802			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry
bis(2-ethylhexyl)phthalate	117-81-7	0.00768			0.0000900	0.000200	0.0000900	mg/L	1/29/2007 19:15	170659	1.00	dry
Dibenzofuran	132-64-9	0.00829			0.0000600	0.000200	0.0000600	mg/L	1/29/2007 19:15	170659	1.00	dry
Di-n-butyl Phthalate	84-74-2	0.00963			0.000110	0.000200	0.000100	mg/L	1/29/2007 19:15	170659	1.00	dry
Fluoranthene	206-44-0	0.00973			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry
Fluorene	86-73-7	0.00846			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry
Naphthalene	91-20-3	0.00803			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:15	170659	1.00	dry
Phenanthrene	85-01-8	0.00861			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry
Phenol	108-95-2	0.00395			0.0000700	0.000200	0.0000700	mg/L	1/29/2007 19:15	170659	1.00	dry
Pyrene	129-00-0	0.00873			0.0000400	0.000200	0.0000400	mg/L	1/29/2007 19:15	170659	1.00	dry

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SEVERN TRENT STL

QUALITY CONTROL RESULTS

Job Number.: 329230 Report Date.: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR-IWPW 1358 ATTN: Eric Matzner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW-846 8270C Units.....: ug/L Analyst...: dry
Method Description.: Semivolatile Organics, Low Level Batch(s)...: 170656 170659

LCS	Laboratory Control Sample	SVS011807B	170470		01/29/2007	1649

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	9.00351		10.0		90.0		32-165	
Acenaphthylene, Water	9.03517		10.0		90.4		10-150	
Anthracene, Water	9.13278		10.0		91.3		23-178	
bis(2-ethylhexyl)phthalate, Water	8.53810		10.0		85.4		25-173	
Dibenzofuran, Water	8.82798		10.0		88.3		35-153	
Di-n-butyl Phthalate, Water	10.0189		10.0		100.2		28-185	
Fluoranthene, Water	9.86885		10.0		98.7		28-180	
Fluorene, Water	9.08203		10.0		90.8		30-189	
2-Methylnaphthalene, Water	8.97375		10.0		89.7		26-168	
Naphthalene, Water	8.89470		10.0		88.9		36-139	
Phenanthrene, Water	9.16445		10.0		91.6		26-166	
Pyrene, Water	9.07833		10.0		90.8		28-173	
Phenol, Water	4.61157		10.0		46.1		20-83	

MB	Method Blank	SVS113006B	170470		01/29/2007	1620

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	0							
Acenaphthylene, Water	0							
Anthracene, Water	0							
bis(2-ethylhexyl)phthalate, Water	0							
Dibenzofuran, Water	0							
Di-n-butyl Phthalate, Water	0							
Fluoranthene, Water	0							
Fluorene, Water	0							
2-Methylnaphthalene, Water	0							
Naphthalene, Water	0							
Phenanthrene, Water	0							
Pyrene, Water	0							
Phenol, Water	0							

MS	Matrix Spike	SVS011807B	329230-15		01/29/2007	1847

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	9.41762		10.0	0.75023	87		46-118	
Acenaphthylene, Water	8.24519		10.0	0	82		30-130	
Anthracene, Water	8.31966		10.0	0.28624	80		30-130	
bis(2-ethylhexyl)phthalate, Water	7.84946		10.0	0	78		60-140	
Dibenzofuran, Water	8.54434		10.0	0.09977	84		30-130	
Di-n-butyl Phthalate, Water	9.74805		10.0	0	97		30-130	
Fluoranthene, Water	9.67403		10.0	0	97		30-130	
Fluorene, Water	8.64915		10.0	0.15526	85		30-130	
2-Methylnaphthalene, Water	8.50693		10.0	0	85		60-140	
Naphthalene, Water	8.21107		10.0	0	82		30-130	
Phenanthrene, Water	8.70350		10.0	0	87		30-130	
Pyrene, Water	8.75423		10.0	0	88		26-115	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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SEVERN TRENT STL

QUALITY CONTROL RESULTS

Job Number.: 329230 Report Date.: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 1358 ATTN: Eric Matzner

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time

Test Method.....: SW-846 8270C Units.....: ug/L Analyst...: dry
Method Description.: Semivolatile Organics, Low Level Batch(s)...: 170656 170659

LCS	Laboratory Control Sample	SVS0118078	170470		01/29/2007	1649

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	9.00351		10.0		90.0		32-165	
Acenaphthylene, Water	9.03517		10.0		90.4		10-150	
Anthracene, Water	9.13278		10.0		91.3		23-178	
bis(2-ethylhexyl)phthalate, Water	8.53810		10.0		85.4		25-173	
Dibenzofuran, Water	8.82798		10.0		88.3		35-153	
Di-n-butyl Phthalate, Water	10.0189		10.0		100.2		28-185	
Fluoranthene, Water	9.86885		10.0		98.7		28-180	
Fluorene, Water	9.08203		10.0		90.8		30-189	
2-Methylnaphthalene, Water	8.97375		10.0		89.7		26-168	
Naphthalene, Water	8.89470		10.0		88.9		36-139	
Phenanthrene, Water	9.16445		10.0		91.6		26-166	
Pyrene, Water	9.07833		10.0		90.8		28-173	
Phenol, Water	4.61157		10.0		46.1		20-83	

MB	Method Blank	SVS1130068	170470		01/29/2007	1620

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	0							
Acenaphthylene, Water	0							
Anthracene, Water	0							
bis(2-ethylhexyl)phthalate, Water	0							
Dibenzofuran, Water	0							
Di-n-butyl Phthalate, Water	0							
Fluoranthene, Water	0							
Fluorene, Water	0							
2-Methylnaphthalene, Water	0							
Naphthalene, Water	0							
Phenanthrene, Water	0							
Pyrene, Water	0							
Phenol, Water	0							

MS	Matrix Spike	SVS0118078	329230-15		01/29/2007	1847

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	9.41762		10.0	0.75023	87		46-118	
Acenaphthylene, Water	8.24519		10.0	0	82		30-130	
Anthracene, Water	8.31966		10.0	0.28624	80		30-130	
bis(2-ethylhexyl)phthalate, Water	7.84946		10.0	0	78		60-140	
Dibenzofuran, Water	8.54434		10.0	0.09977	84		30-130	
Di-n-butyl Phthalate, Water	9.74805		10.0	0	97		30-130	
Fluoranthene, Water	9.67403		10.0	0	97		30-130	
Fluorene, Water	8.64915		10.0	0.15526	85		30-130	
2-Methylnaphthalene, Water	8.50693		10.0	0	85		60-140	
Naphthalene, Water	8.21107		10.0	0	82		30-130	
Phenanthrene, Water	8.70350		10.0	0	87		30-130	
Pyrene, Water	8.75423		10.0	0	88		26-115	

 * %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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SEVERN TRENT STL

QUALITY CONTROL RESULTS

Job Number.: 329230 Report Date.: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 1358 ATTN:

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MS	Matrix Spike	SVS011807B	329230-15		01/29/2007	1847

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Phenol, Water	3.53779		10.0	0	35		10-112	

MSD	Matrix Spike Duplicate	SVS011807B	329230-16		01/29/2007	1915

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Acenaphthene, Water	9.70275	9.41762	10.0	0.75023	90		46-118	
					3.0		31.0	
Acenaphthylene, Water	8.65408	8.24519	10.0	0	87		30-130	
					4.8		50.0	
Anthracene, Water	8.42646	8.31966	10.0	0.28624	81		30-130	
					1.3		50.0	
bis(2-ethylhexyl)phthalate, Water	8.06699	7.84946	10.0	0	81		60-140	
					2.7		30.0	
Dibenzofuran, Water	8.70599	8.54434	10.0	0.09977	86		30-130	
					1.9		50.0	
Di-n-butyl Phthalate, Water	10.1141	9.74805	10.0	0	101		30-130	
					3.7		50.0	
Fluoranthene, Water	10.2236	9.67403	10.0	0	102		30-130	
					5.5		50.0	
Fluorene, Water	8.88198	8.64915	10.0	0.15526	87		30-130	
					2.7		50.0	
2-Methylnaphthalene, Water	8.71208	8.50693	10.0	0	87		60-140	
					2.4		30.0	
Naphthalene, Water	8.43129	8.21107	10.0	0	84		30-130	
					2.6		50.0	
Phenanthrene, Water	9.04388	8.70350	10.0	0	90		30-130	
					3.8		50.0	
Pyrene, Water	9.17297	8.75423	10.0	0	92		26-115	
					4.7		31.0	
Phenol, Water	4.14556	3.53779	10.0	0	41		10-112	
					15.8		23.0	

* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

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SEVERN TRENT STL

SURROGATE RECOVERIES REPORT

Job Number.: 329230 Report Date.: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 1358 ATTN: Erin Matzner

Method.....: Semivolatile Organics, Low Level Method Code...: 8270LL Prep Batch....: 170470
Batch(s).....: 170656 170659 Test Matrix...: Water Equipment Code: EGCMS06

Lab ID	DT	Sample ID	Date	246TBP	2FLUBP	2FLUPH	NITRD5	PHEND6	TERD14
329230- 1		P-12	01/29/2007	80.3	62.5	43.1	68.7	27.1	76.5
329230- 2		MW-08	01/29/2007	83.9	65.0	45.2	82.2	23.3	90.6
329230- 3		MW-11B	01/29/2007	88.6	70.4	46.0	73.4	27.4	81.9
329230- 4		MW-11A	01/29/2007	76.0	73.5	45.3	82.2	21.7	78.7
329230- 5		P-10	01/29/2007	69.2	70.0	38.1	76.2	24.8	84.9
329230- 6		P-101	01/29/2007	86.8	69.5	38.4	73.5	20.4	91.2
329230- 7		MW-07	01/29/2007	83.6	86.6	45.1	85.5	25.3	90.8
329230- 8		MW-10B	01/29/2007	92.2	77.2	51.7	79.3	29.5	82.9
329230- 8		MW-10B	01/30/2007	92.2	83.4	55.1	81.9	30.3	90.9
329230- 9		MW-10A	01/29/2007	84.6	64.6	35.9	59.5	23.9	85.6
329230- 10		MW-02	01/29/2007	91.0	84.8	46.8	79.2	30.5	86.8
329230- 11		MW-01A	01/29/2007	89.5	85.8	51.6	82.6	31.1	82.9
329230- 11		MW-01A	01/30/2007	95.8	91.3	52.9	84.6	29.9	91.1
329230- 12		MW-01B	01/29/2007	45.4	63.6	29.4	63.3	19.7	39.4
329230- 12		MW-01B	01/30/2007	46.3	62.2	27.4	60.0	18.0	45.1
329230- 13		FB-1	01/29/2007	94.9	86.8	58.3	89.4	33.2	96.7
329230- 15	MS	MW-10A MS	01/29/2007	94.4	85.0	50.9	85.7	31.2	90.8
329230- 16	MSD	MW-10A MSD	01/29/2007	92.2	90.0	58.1	89.3	34.2	91.9
170470--21	LCS		01/29/2007	96.2	89.4	49.3	89.5	33.7	85.5
170470--21	MB		01/29/2007	96.1	74.3	52.2	80.2	31.4	85.5

Test	Test Description	Limits
246TBP	2,4,6-Tribromophenol	10 - 123
2FLUBP	2-Fluorobiphenyl	43 - 116
2FLUPH	2-Fluorophenol	21 - 100
NITRD5	Nitrobenzene-d5	35 - 114
PHEND6	Phenol-d6	10 - 94
TERD14	Terphenyl-d14	33 - 141

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QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 02/06/2007

REPORT COMMENTS

1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
2) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
3) According to 40CFR Part 136.3, pH, Chlorine Residual, and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field,(e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.
4) For all USACE projects, the QC limits are based on "mean +/- 2 sigma", which are the warning limits.

General Information:

- Cresylic Acid is the combination of o,m and p-Cresol. The combination is reportesd as the final result.
- m-Cresol and p-Cresol co-elute. The result of the two is reported as either m&p-cresol or as p-cresol.
- m-Xylene and p-Xylene co-elute. The result of the two is reported as m,p-Xylene.
- N-Nitrosodiphenylamine decomposes in the gas chromatograph inlet forming dipheylamine and, consequently, may be detected as diphenylamine.
- Methylene Chloride and Acetone are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
- Trimethysilyl(Diazomethane) is used to esterify acid herbicides in Method SW-846 8151A.
- For Inorganic analyses, duplicate QC limits are determined as follows: If the sample result is less than or equal to 5 times the reporting limit, the RPD limit is equal to the reporting limit. If the sample result is greater than 5 times the reporting limit, the RPD limit is the method defined RPD.
- For TRRP reports, the header on the column RL is equivalent to a MQL/PQL.

Explanation of Qualifiers:

U - This qualifier indicates that the analyte was analyzed but not detected.
J - (Organics only) This qualifier indicates that the analyte is an estimated value between the RL and the MDL.
B - (Inorganics only) This Qualifier indicates that the analyte is an estimated value between the RL and the MDL.
N - (Organics only) This flag indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic charachterization of a TIC, such as "chlorinated hydrocarbon", the "N" flag is not used.

Explanation of General QC Outliers:

A - Matrix interference present in sample.
a - MS/MSD analyses yielded comparable poor recoveries, indicating a possible matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
b - Target analyte was found in the method blank.
M - QC sample analysis yielded recoveries outside QC acceptance criteria. This sample was reanalyzed.
L - LCS analysis yielded high recoveries, indicating a potential high bias. No target analytes were observed above the RL in the associated samples.
G - Marginal outlier within 1% of acceptance criteria.
r - RPD value is outside method acceptance criteria.
C - Poor RPD values observed due to the non-homogenous nature of the sample.
O - Sample required dilution due to matrix interference.
D - Sample reported from a dilution.
d - Spike and/or surrogate diluted.
P - The recovery of this analyte is outside default QC limits. The data is accepted and will be used to calculate in-house statistical limits.
E - The reported concentration exceeds the instrument calibration.
F - The analyte is outside QC limits. The sample data is accepted since this analyte is not reported in associated samples.
H - Continuing Calibration Verification (CCV) standard is not associated with the samples reported.

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QUALITY ASSURANCE METHODS
REFERENCES AND NOTES

Report Date: 02/06/2007

q - See the subcontract final report for qualifier explanation.
W - The MS/MSD recoveries are outside QC acceptance criteria because the amount spiked is much less than the amount found in the sample.
K - High recovery will not affect the quality of reported results.
Z - See case narrative.

Explanation of Organic QC Outliers:

e - Method blank analysis yielded phthalate concentrations above the RL. Phthlates are recognized potential laboratory contaminants. Its presence in the sample up to five times the amount reported in the blank may be attributed to laboratory contamination.
S - Sample reanalyzed/reextracted due to poor surrogate recovery. Reanalysis confirmed original analysis indicating a possible matrix interference.
T - Sample analysis yielded poor surrogate recovery.
R - The RPD between the two GC columns is greater than 40% and no anomalies are present. The higher result is reported as per EPA Method 8000B.
I - The RPD between the two GC columns is greater than 40% and anomalies are present. The lower of the two results has been reported.
X - Gaseous compound. In-house QC limits are advisory.
Y - Ketone compounds have poor purge efficiency. In-house QC limits are advisory.
f - Surrogate not associated with reported analytes.

Explanation of Inorganic QC Outliers:

Q - Method blank analysis yielded target analytes above the RL. Associated sample results are greater than 10 times the concentrations observed in the method blank.
V - The RPD control limit for sample results less than 5 times the RL is +/- the RL value. Sample and duplicate results are within method acceptance criteria.
e - Serial dilution failed due to matrix interference.
g - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficent for the MSA is greater than or equal to 0.995.
s - BOD/cBOD seed value is not within method acceptance criteria. Due to the nature of the test method, the sample cannot be reanalyzed.
l - BOD/cBOD LCS value is not within method acceptance criteria. Due to the nature of the test method, sample cannot be reanalyzed.
N - Spiked sample recovery is not within control limits.
n - Sample result quantitated by Method of Standard Additions (MSA) due to the analytical spike recovery being below 85 percent. The correlation coefficient for the MSA is less than 0.995.
* - Duplicate analysis is not within control limits.

Abbreviations:

Batch - Designation given to identify a specific extraction, digestion, preparation, or analysis set.
CCV - Continuing Calibration Verification
CRA - Low level standard check - GFAA, Mercury
CRI - Low level standard check - ICP
Dil Fac - Dilution Factor - Secondary dilution analysis
DLFac - Detection Limit Factor
DU - Duplicate
EB - Extraction Blank (TCLP, SPLP, etc.)
ICAL - Initial Calibration
ICB - Initial Calibration Blank
ICV - Initial Calibration Verification
ISA - Interference Check Sample A - ICP
ISB - Interference Check Sample B - ICP
LCD - Laboratory Control Duplicate
LCS - Laboratory Control Sample

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QUALITY ASSURANCE METHODS
REFERENCES AND NOTES

Report Date: 02/06/2007

MB - Method Blank
MD - Method Duplicate
MDL - Method Detection Limit
MQL - Method Quantitation Limit (TRRP)
MS - Matrix Spike
MSD - Matrix Spike Duplicate
ND - Not Detected
PB - Preparation Blank
PREPF - Preparation Factor
RL - Reporting Limit
RPD - Relative Percent Difference
RRF - Relative Response Factor
RT - Retention Time
SQL - Sample Quantitation Limit (TRRP)
TIC - Tentatively Identified Compound

Method References:

(1) EPA 600/4-79-020 Methods for the Analysis of Water and Wastes, March 1983.
(2) EPA 600/R-94-111 Methods for the Determination of METals in Environmental Samples, Supplement I, May 1994.
(3) EPA SW846 Test Methods for Evaluating Solid Waste, Third Edition, September 1986; Update I July 1992; Update II, September 1994, Update IIA August 1993; Update IIB, January 1995; Update III, December 1996, Update IVA January 1998, Update IVB November 2000.
(4) Standard Methods for the Examination of Water and Wastewater, 16th Edition (1985), 17th Edition (1989), 18th Edition (1992), 19th Edition (1995), 20th Edition (1998).
(5) HACH Water Analysis Handbook 3rd Edition (1997).
(6) Federal Register, July 1, 1990 (40 CFR Part 136 Appendix A).
(7) Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, 2nd Edition, January 1997.

(9) Diagnosis and Improvement of Saline and Alkali Soils, Agriculture Handbook No. 60, United States Department of Agriculture, 1954.

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SEVERN TRENT STL

LABORATORY CHRONICLE

Job Number: 329230 Date: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 1358 ATTN: Eric Matzner

Lab ID: 329230-1 Client ID: P-12
Date Recvd: 01/23/2007 Sample Date: 01/22/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
	Data Package Validation	1	171016		02/05/2007 0000	
	Electronic Data Deliverables	1				
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
	GC/MS Semi-Volatile Package Production	1	170740		01/31/2007 1100	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1717	1.00000

Lab ID: 329230-2 Client ID: MW-08
Date Recvd: 01/23/2007 Sample Date: 01/22/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1745	1.00000

Lab ID: 329230-3 Client ID: MW-11B
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1814	1.00000

Lab ID: 329230-4 Client ID: MW-11A
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1842	1.00000

Lab ID: 329230-5 Client ID: P-10
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1911	1.00000

Lab ID: 329230-6 Client ID: P-101
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 1939	1.00000

Lab ID: 329230-7 Client ID: MW-07
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170656	170470	01/29/2007 2008	1.00000

Lab ID: 329230-8 Client ID: MW-10B
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007 1555	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/30/2007 1501	2.00000

Lab ID: 329230-9 Client ID: MW-10A
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007 1623	1.00000

Lab ID: 329230-10 Client ID: MW-02
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007 1652	1.00000

Lab ID: 329230-11 Client ID: MW-01A
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED	DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007 1330	

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SEVERN TRENT STL

LABORATORY CHRONICLE

Job Number: 329230 Date: 02/06/2007

CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: UPRR HWPW 1358 ATTN: Eric Matzner

Lab ID: 329230-11 Client ID: MW-01A
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007	1721	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/30/2007	1530	5.00000

Lab ID: 329230-12 Client ID: MW-01B
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007	1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007	1750	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/30/2007	1559	5.00000

Lab ID: 329230-13 Client ID: FB-1
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007	1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007	1818	1.00000

Lab ID: 329230-15 Client ID: MW-10A MS
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007	1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007	1847	1.00000

Lab ID: 329230-16 Client ID: MW-10A MSD
Date Recvd: 01/23/2007 Sample Date: 01/23/2007

METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Level	1	170470		01/25/2007	1330	
SW-846 8270C	Semivolatile Organics, Low Level	1	170659	170470	01/29/2007	1915	1.00000

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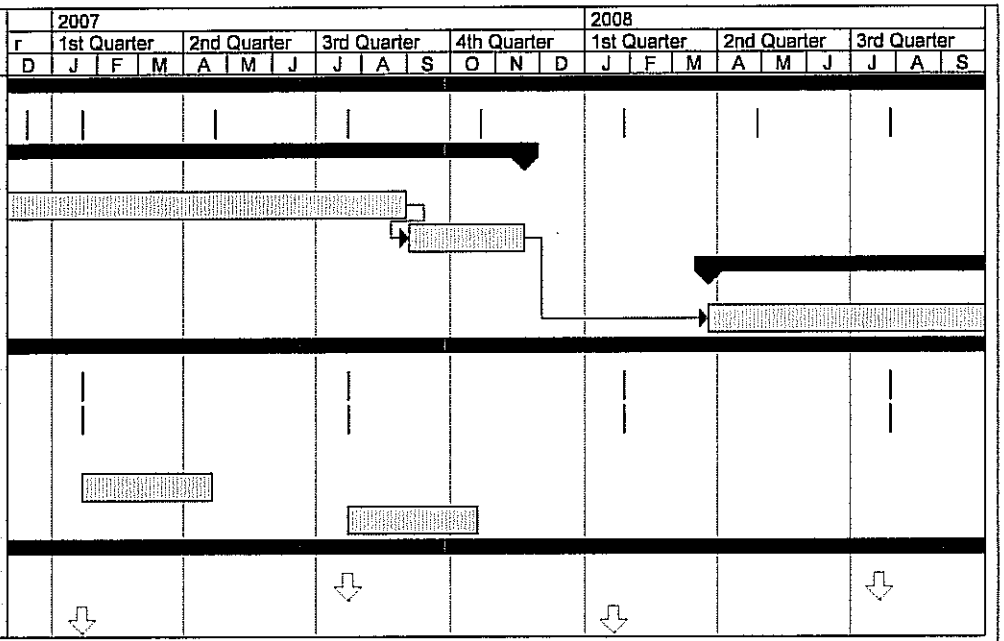
APPENDIX D
UPDATED COMPLIANCE SCHEDULE

ID	Task Name/Permit or CP Section No.
1	**Facility Management**
2	General Inspection Requirements (quaterly) [Permit Section III.D; Table III.D]
26	**Addendum to the Affected Property Assessment Report (APAR) [Permit Section IX.A; CP Section VIII.D]**
27	Field Investigation Activities
28	Prepare and Submit Addendum to the APAR
29	**Corrective Measures Implementation (CMI)/Response Action Plan (RAP) [CP Section VIII.F]**
30	Prepare and Submit Response Action Plan (RAP)
31	**Ground-Water Monitoring Program [Permit Section VI.A.; CP Section VI.]**
32	Water Level Measurements (Semiannually) [CP Section VI.C.4.a]1
45	Monitoring Well Inspections (Semiannually) [CP Section VI.C.4.a]1
68	Ground Water Sampling and Data Evaluation (2nd 2006 Semiannual) [CP Setion VI.C.2]
69	Ground Water Sampling and Data Evaluation (1st Semiannual) [CP Setion VI.C.2]
70	Ground Water Sampling and Data Evaluation (2nd Semiannual) [CP Setion VI.C.2]
71	**Response and Reporting [Permit Section II.B.7; CP Section VII.)**
72	First Semi-Annual GW Monitoring Report - July 21 [CP Section VII.C.2]
79	Second Semi-Annual GW Monitoring Report - January 21 [CP Section VII.C.2]



Compliance Schedule
UPRR Houston Wood Preserving Works Site
Houston, Texas

Task
Progress
Milestone
Summary
Rolled Up Task
Rolled Up Milestone
Rolled Up Progress
Split
External Tasks
Project Summary
External Milestone
Deadline