### CORRECTIVE ACTION MONITORING REPORT 2008 SECOND SEMIANNUAL EVENT

### FORMER HOUSTON WOOD PRESERVING WORKS 4910 LIBERTY ROAD HOUSTON, TEXAS

January 15, 2009

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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 Wood Preserving Works facility (the Site) located in Houston, Texas. The groundwater monitoring activities for this period were performed by Delta Environmental Consultants, Inc. (Delta) in July 2008.

The two uppermost groundwater bearing units, the A-Transmissive Zone (A-TZ) and the B-Transmissive Zone (B-TZ), were monitored during this period. Groundwater elevation data collected during the July 2008 sampling event show groundwater flow to the west in the A-TZ with a hydraulic gradient of approximately 0.005. A-TZ groundwater flow direction is similar to the groundwater flow direction observed during the January 2008 first semi-annual monitoring event.

Groundwater elevation data collected in the B-TZ show groundwater flow to the west-southwest with a hydraulic gradient of approximately 0.004. Groundwater flow in the B-TZ zone is similar to the flow direction observed during previous monitoring events.

Analytical results from the July 2008 sampling event were compared to Texas Commission on Environmental Quality Texas Risk Reduction Program Protective Concentration Limits, as designated in Section IV.D of the Compliance Plan, dated June 10, 2005. Constituent concentrations were below their respective PCLs for the sixth consecutive semi-annual monitoring event. Monitoring wells in both the A-TZ and B-TZ are considered to be compliant for this monitoring period.

#### 2.0 INTRODUCTION

This semi-annual report presents a summary and evaluation of groundwater monitoring data collected during the 2008 second semi-annual monitoring period (July through December) 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).

Delta Environmental Consultants, Inc. (Delta) conducted groundwater monitoring activities at the Site on July 16, 2008. 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 second half of 2008 as described in the CP, Section VII.C.2. This section requires the following reporting elements:

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.)	Section 3.1.1 and 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.2.1.)	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 December 2008, 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 2008 SECOND SEMI-ANNUAL 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 Second 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 monitoring 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.

January 15, 2008

#### 3.1.2 Groundwater Monitoring

Delta performed quarterly well inspections and semi-annual groundwater sampling activities on July 16, 2008. Groundwater sampling was performed using procedures outlined in a U.S. Environmental Protection Agency (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<sup>®</sup> 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 TestAmerica 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 3.5 gallons of purge water was generated during the July 2008 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"

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detailed in the 1986 EPA memorandum "RCRA Regulatory Status of Contaminated Groundwater". However, purge water and associated personal protective equipment (PPE) were disposed of at US Ecology Texas LP in Robstown, Texas on November 20, 2008 under water codes 0909101H and 0915301H, respectively.

#### 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 2008 second 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 Texas Risk Reduction Program (TRRP) Tier 1 Protective Concentration Levels (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) were 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 or any indication of LNAPL or DNAPL.

#### **3.6 Potentiometric Surface Maps**

Groundwater elevation data recorded during the 2008 second 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 July 2008 sampling event show groundwater flow in the A-TZ to the west with a hydraulic gradient of approximately 0.005. A-TZ groundwater flow direction is similar to the flow direction observed during the January 2008 first semi-annual monitoring event.

Groundwater elevation data collected in the B-TZ show groundwater flow to the west-southwest with a hydraulic gradient of approximately 0.004. 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 SWMU No. 1; therefore, this provision is not applicable.

#### 3.9 Contaminant Mass Recovered

To date, a recovery system has no been installed at the SWMU 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
- 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 July 2008 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 compliant 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). Including the 2008 second semi-annual analytical data, the SMWU No. 1 monitoring wells have been compliant for six consecutive semi-annual monitoring events (three years).

A QA/QC review and Data Usability Summary (DUS) were prepared for the July 2008 analytical data. Analytical results were flagged based on the data validation review of the QA/QC samples.

The following samples were qualified as *Estimated* (J) or (UJ):

- MW-02, MW-07, and MW-08 for Acenaphthene
- MW-02 for Anthracene
- MW-01A, DUP-01, MW-10A, MW-10B, P-10, DUP-02, and P-12 for Bis(2ethylhexyl)phthalate

- P-10 for Fluoranthene;
- MW-07 and MW-08 for Phenanthrene; and
- MW-02 for Pyrene.

The following samples were qualified as *Estimated Low (UJL)*:

- P-10, P-12, DUP-02, MW-10B, and MW-11B for Phenol.

The following samples were qualified as *Blank Affected* (U):

- P-10, DUP-02, and P-12 for Di-n-butyl phthalate;
- MW-07, P-10, DUP-01, MW-08, P-12, DUP-02, and MW-02 for Naphthalene.

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 2008 Second 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: 2008 Second Semiannual Event

#### Houston Wood Preserving Works Houston, Texas

								Ν	Ionit	oring	y Well IDs (C	once	ntrat	ions mg/L)								
Analyte	PCL (mg/L)	MW-0	)1A		DUP	-01		MW-	02		MW-	07		MW-(	08		<b>MW-</b> 1	0A		MW-1	1 <b>A</b>	
		7/16/2008	LQ	VQ	7/16/2008	LQ	VQ	7/16/2008	LQ	VQ	7/16/2008	LQ	VQ	7/16/2008	LQ	VQ	7/16/2008	LQ	VQ	7/16/2008	LQ	VQ
Acenaphthene	1.5	0.126			0.119			0.0218			<0.00029	U		< 0.0003	U		< 0.00029	U		0.02		
Acenaphthylene	1.5	0.00143			0.00135			0.0003	J	J	0.00044	J	J	0.00044	J	J	<0.00029	U		<0.0003	U	
Anthracene	7.3	0.00267			0.00232			0.00042	J	J	0.000982			0.000669			<0.00019	U		0.00054		
bis(2-ethylhexyl)phthalate	0.006	0.00137	J	J	0.00126	J	J	<0.00019	U		<0.00019	U		<0.0002	U		0.0002	J	J	<0.0002	U	
Dibenzofuran	0.098	0.00774		J	0.00163		J	0.00673			<0.00029	U		<0.0003	U		<0.00029	U		<0.0003	U	
Fluoranthene	0.98	0.00923			0.00836			0.000961			<0.00019	U		<0.0002	U		<0.00019	U		0.00387		
Fluorene	0.98	0.0659			0.0551			0.0103			<0.00019	U		<0.0002	U		<0.00019	U		0.00089		
2-Methylnaphthalene	0.098	0.0109		J	0.00224		J	<0.00039	U		<0.00039	U		<0.0004	U		<0.00038	U		<0.0004	U	
Naphthalene	0.49	0.0168	b	J	0.00312		U	0.00118		U	0.000675	b	U	0.000654		U	<0.00038	U	UJL	<0.0004	U	UJL
Phenanthrene	0.73	0.00177			0.000783			<0.00019	U		0.00036	J	J	0.00036	J	J	<0.00019	U		<0.0002	U	
Pyrene	0.73	0.00417			0.00375			0.000450	J	J	<0.00019	U		<0.0002	U		<0.00019	U		0.00184		

Notes: PCL = Protective Concentration Level

The Compliance Plan Section IV.D defines the Groundwater Protection Standard (GWPS) as the PCL DUP-01= Duplicate sample collected at MW-01A

#### LQ - Lab Qualifier

J = Estimated value between the SDL and the MDL

U = Value not detected greater than the MDL

b = Targen analyte was found in Method Blank

VQ - Validation Qualifier

J = Estimated data; The reported sample concentration is approximate due to the exceedance of one or more QC requirements

UJ = Estimated data; The analyte was not detected above the reported sample detecteion limit (SDL) however, the SDL is approximate due to exceedance of one or more QC requirements

L = Bias in sample result is likely to be low

# Table 2 Summary of Analytical Results for the B-Transmissive Zone (B-TZ) Semiannual Monitoring Report: 2008 Second Semiannual Event

#### Houston Wood Preserving Works Houston, Texas

						Mon	itorin	g Well IDs (Co	oncei	ntrati	ons mg/L)					
Analyte	PCL (mg/L)	<b>MW-1</b> 7/16/2008	DB	VQ	<b>MW-1</b> <sup>2</sup> 7/16/2008	1B LQ	VQ	<b>P-10</b> 7/16/2008	LQ	VQ	<b>DUP-(</b> 7/16/2008	<b>)2</b> LQ	VQ	<b>P-12</b> 7/16/2008	2 LQ	VQ
Acenaphthene	1.5	0.0975			0.12			0.0106			<0.0003	U		< 0.0003	U	<u> </u>
Acenaphthylene	1.5	0.00113			0.00126			0.00053			< 0.0003	U		<0.0003	U	
Anthracene	7.3	0.00484			0.00472			0.000747			0.000566			0.000552		
bis(2-ethylhexyl)phthalate	0.006	0.0002	J	J	<0.00021	U		0.00022	J	J	0.00064	J	J	0.00034	J	J
Dibenzofuran	0.098	0.0392			0.0649			0.00176			<0.0003	U		<0.0003	U	
Di-n-butyl phthalate	2.4	< 0.0002	U		<0.00021	U		0.00092	Jb	U	0.00087	Jb	U	0.00085	Jb	U
Fluoranthene	0.98	0.00397			0.00383			0.00022	J		<0.0002	U		<0.0002	U	
Fluorene	0.98	0.0457			0.0578			0.00245		J	<0.0002	U		<0.0002	U	
Naphthalene	0.49	0.014		JL	0.0772		JL	0.00079	b	U	0.000639	b	U	0.000626		U
Phenol	7.3	<0.0002	U	UJL	<0.00021	U	UJL	<0.00021	U	UJL	<0.0002	U	UJL	<0.0002	U	UJL
Pyrene	0.73	0.00174			0.00163			<0.00021	U		0.00166			0.00211		

Notes:

PCL = Protective Concentration Level

The Compliance Plan Section IV.D defines the Groundwater Protection Standard (GWPS) as the PCL

DUP-02 = Duplicate sample collected at P-12

LQ - Lab Qualifier

J = Estimated value between the SDL and the MDL

U = Value not detected greater than the MDL

b = Targen analyte was found in Method Blank

#### VQ - Validation Qualifier

J = Estimated data; The reported sample concentration is approximate due to the exceedance of one or more QC requirements

UJ = Estimated data; The analyte was not detected above the reported sample detecteion limit (SDL) however, the SDL is approximate due to exceedance of one or more QC requirements L = Bias in sample result is likely to be low

## Table 3 Summary of Analytical Results for Quality Assurance/Quality Control Samples Semiannual Monitoring Report: 2008 Second Semiannual Event

#### Houston Wood Preserving Works Houston, Texas

		S	am	ple IDs (Concer	trations mg/L)
Analyte	PCL	FB-01		P-12(MS) <sup>(1)</sup>	P-12(MSD) <sup>(1)</sup>
Analyte	(mg/L)	Field Blank		Matrix Spike	Matrix Spike Duplicate
		7/16/2008		7/16/2008	7/16/2008
Acenaphthene	1.5	<0.00033	U	0.00756	0.00664
Acenaphthylene	1.5	< 0.00033	U	0.00715	0.00603
Anthracene	7.3	<0.00022	U	0.00699	0.00726
bis(2-ethylhexyl)phthalate	0.006	<0.00022	U	0.00606	0.00651
Dibenzofuran	0.098	< 0.00033	U	0.008	0.00727
Di-n-butyl phthalate	2.4	0.00096	Jb	0.00775	0.00847
Fluoranthene	0.98	<0.00022	U	0.00849	0.009
Fluorene	0.98	<0.00022	U	0.00769	0.0073
2-Methylnaphthalene	0.098	<0.00044	U	NA	NA
Naphthalene	0.49	0.000689	b	0.0063	0.00567
Phenanthrene	0.73	<0.00022	U	NA	NA
Phenol	7.3	<0.00022	U	0.00298	0.00286
Pyrene	0.73	<0.00022	U	0.00962	0.00998

#### Notes:

PCL = Protective Concentration Level

(1) = P-12(MS) and P-12(MSD) are matrix spike and matrix spike duplicate samples collected at P-12, respectively.

U = Not detected above the Method Detection Limit

NA = not analyzed

J = Estimated value between the SDL and MDL

b = Target analyte was found in Method Blank

## Table 4Water Level MeasurementsSemiannual Monitoring Report: 2008 First Semiannual 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 Monito	ring Locations			
MW-01A	47.92	7/16/2008	7.21	ND	20.2	19.9	40.71
MW-02	47.97	7/16/2008	7.72	ND	20.3	20.2	40.25
MW-07	48.86	7/16/2008	7.94	ND	NA	24.8	40.92
MW-08	49.33	7/16/2008	8.32	ND	26.8	25.7	41.01
MW-10A	49.86	7/16/2008	9.31	ND	25.9	25.6	40.55
MW-11A	50.05	7/16/2008	9.25	ND	24.4	24.1	40.80
	•		B-TZ Monito	ring Locations			
MW-10B	49.94	7/16/2008	9.42	ND	48.8	48.35	40.52
MW-11B	50.18	7/16/2008	9.49	ND	46.8	47.10	40.69
P-10	47.69	7/16/2008	6.91	ND	40.0	43.89	40.78
P-12	48.78	7/16/2008	6.78	ND	40.0	43.36	42.00

Notes

 $\overline{\text{BTOC}}$  = feet below the top of the well casing

ft. MSL = feet above Mean Sea Level

NA = Information not available

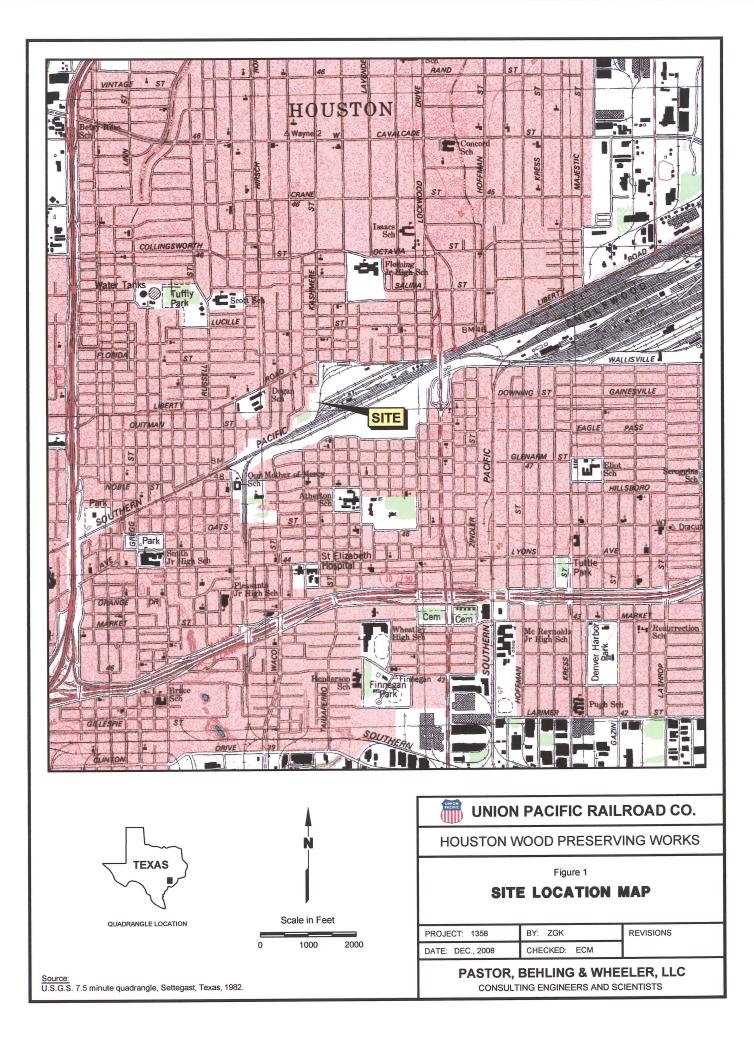
ND = Not Detected

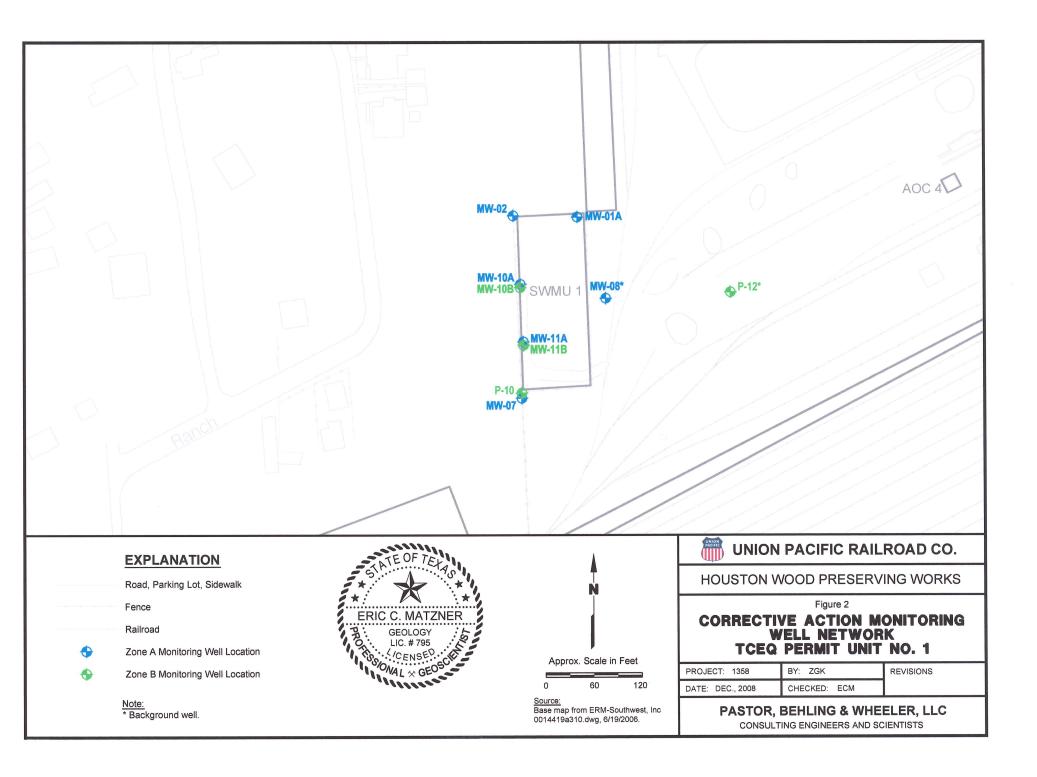
# Table 5Compliance Status of Wells and PiezometersSemiannual Monitoring Report: 2008 First Semiannual Event

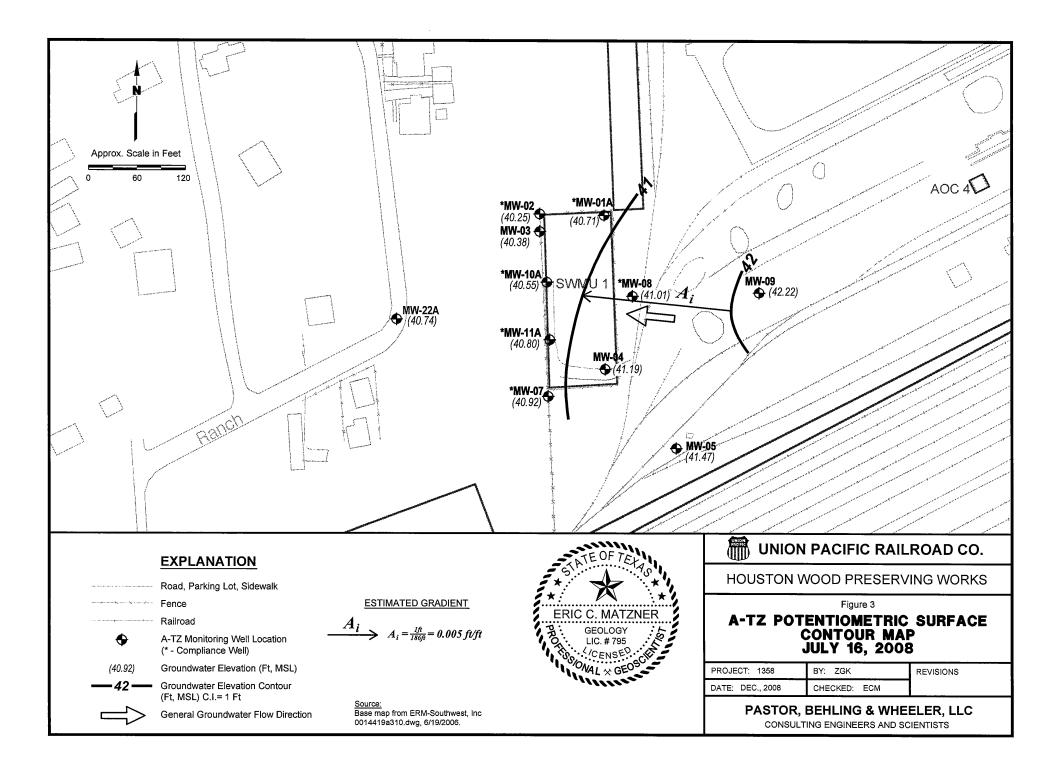
#### Houston Wood Preserving Works Houston, Texas

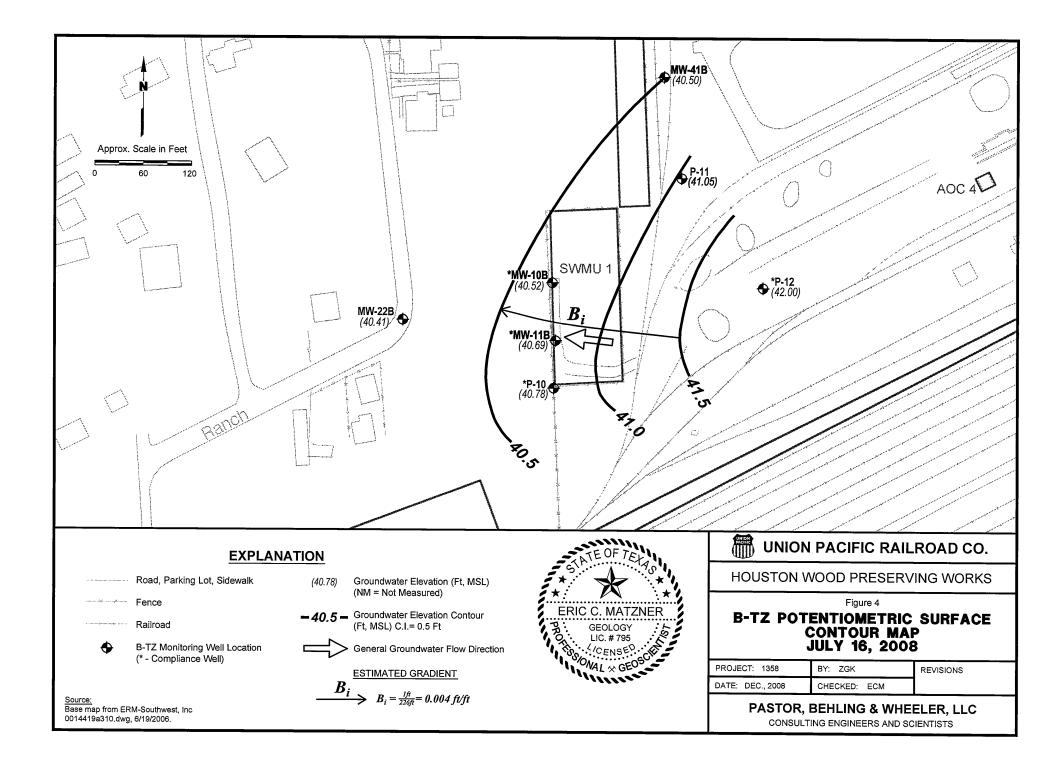
Zone	Monitoring Well Location	Well Designation	Compliance Status
A-TZ Monitoring Location	MW-01A	Point of Compliance	Compliant
	MW-02	Point of Compliance	Compliant
	MW-07	Point of Compliance	Compliant
	MW-08	Background Well	Compliant
	MW-10A	Point of Compliance	Compliant
	MW-11A	Point of Compliance	Compliant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

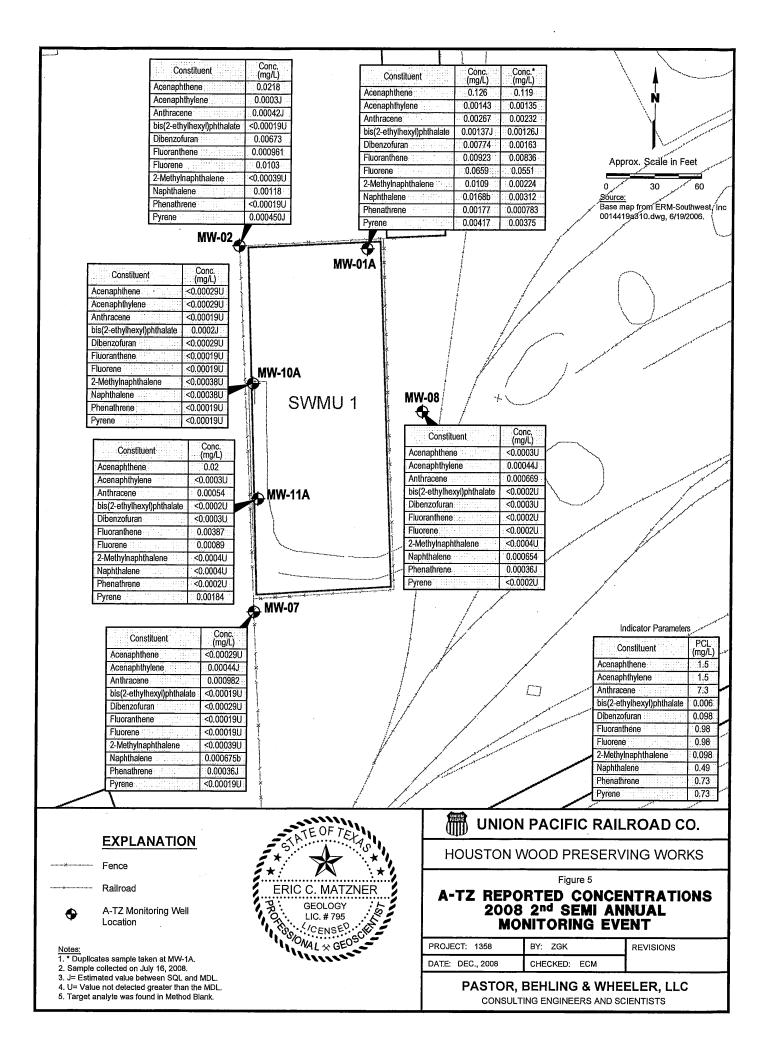
FIGURES

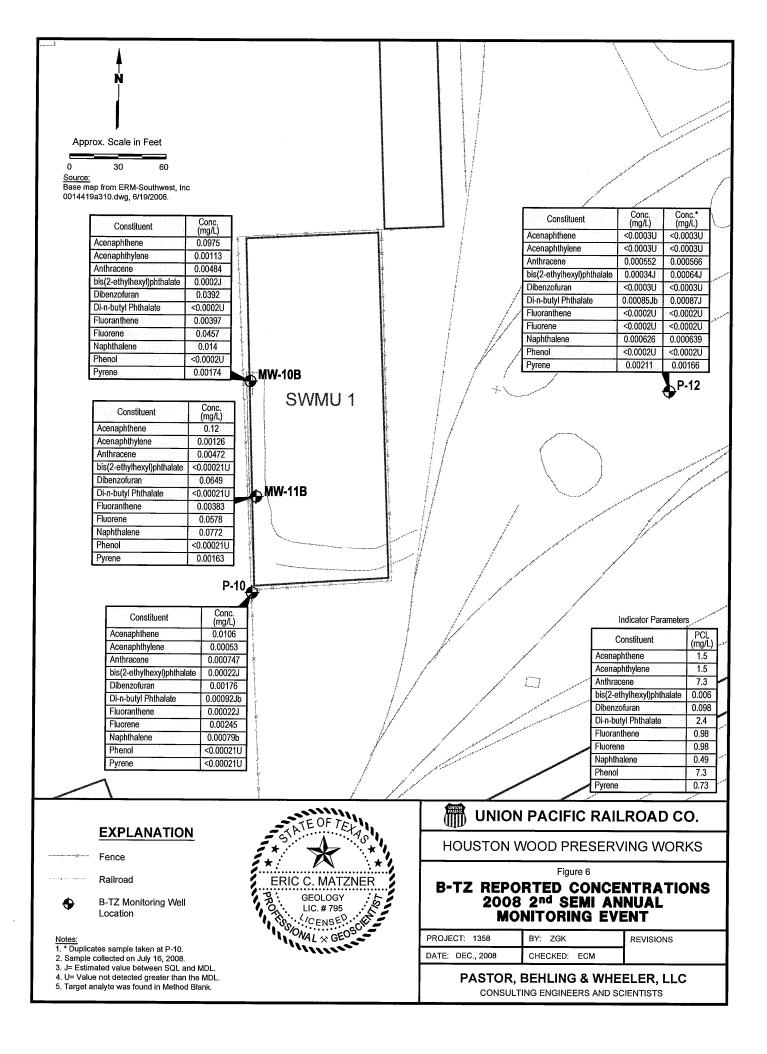












#### APPENDIX A COMPLIANCE PLAN TABLES

Union Pacific Railroad Company - Houston Tie Plant Compliance Plan No. 50343

#### TABLE III - CORRECTIVE ACTION PROGRAM Table of Detected Hazardous and Solid Waste Constituents 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 <sup>PCL</sup>
Acenaphthylene	$1.5^{PCL}$	Acenaphthylene	$1.5^{PCL}$
Anthracene	$7.3^{PCL}$	Anthracene	7.3 <sup>PCL</sup>
Dibenzofuran	$0.098^{\text{PCL}}$	Dibenzofuran	0.098 <sup>PCL</sup>
Bis(2-ethylhexyl)phthalate	$0.006^{\text{PCL}}$	Bis(2-ethylhexyl)phthalate	0.006 <sup>PCL</sup>
Fluoranthene	0.98 <sup>PCL</sup>	Fluoranthene	0.98 <sup>PCL</sup>
Fluorene	0.98 <sup>PCL</sup>	Fluorene	0.98 <sup>PCL</sup>
2-Methylnaphthalene	0.098 <sup>pcl</sup>	Di-n-butyl phthalate	$2.4^{PCL}$
Naphthalene	0.49 <sup>PCL</sup>	Naphthalene	0.49 <sup>PCL</sup>
Phenanthrene	0.73 <sup>PCL</sup>	Phenol	7.3 <sup>PCL</sup>
Pyrene	0.73 <sup>PCL</sup>	Pyrene	0.73 <sup>PCL</sup>

PCL Alternate Concentration Limit pursuant to 30 TAC §335.160(b) based upon the Protective Concentration Level determined under 30 TAC Chapter 350 for Residential Land Use. 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.

#### APPENDIX B FIELD PARAMETERS

#### TABLE B-1 Groundwater Sampling Field Parameters Semiannual Monitoring Report: 2008 First Semiannual Event

#### Houston Wood Preserving Works Houston, Texas

					Monitorin	g Well IDs				
Field Description			A-Transmi	ssive Zone				B-Transmi	ssive Zone	
Field Parameter	MW-01A	MW-02	MW-07	MW-08	MW-10A	MW-11A	MW-10B	MW-11B	P-10	P-12
	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008
Time Sampled (hrs CST)	9:41	10:59	8:35	10:55	11:26	12:20	11:50	12:47	9:08	11:25
Temperature (°C)	25.33	24.55	24.39	28.68	25.83	25.62	24.84	24.91	24.9	27.27
pH (Standard Units)	6.59	6.95	6.81	7.2	7.02	6.89	6.89	6.93	6.93	6.8
Specific Conductivity (µS)	1,601	792	870	870	1,009	1,232	1,311	1,248	1,210	656
Dissolved Oxygen (mg/L)	0.59	1.04	0.96	4.21	1.51	0.89	0.93	0.63	0.65	0.62
Turbidity (NTU)	2.40	4.24	2.90	2.80	4.42	8.43	1.75	1.08	2.30	2.40

APPENDIX C LABORATORY ANALYTICAL REPORTS and DATA USABILITY SUMMARIES



THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

JOB NUMBER: 357238 Project ID: 1620 HOUSTON TX- WOOD PR

Prepared For:

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

Attention: Eric Matzner

Date: 08/11/2008

Ludhadk

Signature

Name: Sachin G. Kudchadkar

Title: Project Manager III

E-Mail: sachin.kudchadkar@testamericainc.com

\$/n/of Date

TestAmerica Laboratories, Inc 6310 Rothway Drive Houston, TX 77040

PHONE: 713-690-4444

TOTAL NO. OF PAGES



08/11/2008\_

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

Project : 1620 HOUSTON TX- WOOD PRESERVING WORKS Project No. : 357238 Date Received : 07/16/2008 TestAmerica Job : 357238

Dear Eric Matzner:

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

1.	WG-1620-FB01-071608	2.	WG-1620-MW07-071608
з.	WG-1620-P10-071608	4.	WG-1620-MW01A-071608
5.	WG-1620-FD01-071608	6.	WG-1620-MW08-071608
7.	WG-1620-P12-071608	8.	WG-1620-P12-071608 MS
9.	WG-1620-P12-071608 MSD	10.	WG-1620-FD02-071608
11.	WG-1620-TB04-071608	12.	WG-1620-MW02-071608
13.	WG-1620-MW10A-071608	14.	WG-1620-MW10B-071608
15.	WG-1620-MW11A-071608	16.	WG-1620-MW11B-071608

All hold 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 TestAmerica Houston's NELAP accredited parameters. Any exceptions to the NELAP requirements will be flagged accordingly and where applicable, 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 TestAmerica 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,

thed

Sachin G. Kudchadkar Project Manager

Table 1 Cross Reference Lab Identifications, Field Identifications, and Methods

357238-001         WG-1620-FB01-071608           357238-002         WG-1620-MW07-071608           357238-003         WG-1620-MW01A-0716           357238-004         WG-1620-MW01A-0716           357238-005         WG-1620-MW01A-0716           357238-005         WG-1620-MW01A-0716           357238-005         WG-1620-MW08-071608           357238-006         WG-1620-MV08-071608           357238-007         WG-1620-P112-071608           357238-008         WG-1620-P112-071608           357238-009         WG-1620-P12-071608           357238-009         WG-1620-P12-071608           357238-010         WG-1620-P12-071608           357238-010         WG-1620-P12-071608           357238-010         WG-1620-P12-071608	0 2104 074600		
		×	ł
	WG-1620-MW07-071608	1	1
	WG-1620-P10 -071608	•	1
	WG-1620-MW01A-071608	1	1
	WG-1620-FD01-071608	1	1
	WG-1620-MW08-071608	•	<b>~</b> ~~
	WG-1620-P12 -071608	1	4
	WG-1620-P12 -071608 MS	1	1
	WG-1620-P12 -071608 MSD	-	<b>~</b>
-	WG-1620-FD02-071608	1	1
	WG-1620-TB04-071608	1	
357238-012 WG-1620-	WG-1620-MW02 -071608	1	1
357238-013 WG-1620-	WG-1620-MW10A-071608	1	1
357238-014 WG-1620-	WG-1620-MW10B-071608	1	~
357238-015 WG-1620-	WG-1620-MW11A-071608	ſ	1
357238-016 WG-1620-	WG-1620-MW11B-071608	Ļ	1

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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:  $\boxtimes$ Field chain-of-custody documentation;  $\boxtimes$ R.1 Sample identification cross-reference;  $\boxtimes$ R2 Test reports (analytical data sheets) for each environmental sample that includes:  $\boxtimes$ R3 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). Surrogate recovery data including:  $\boxtimes$ R4 a) Calculated recovery (%R), and b) The laboratory's surrogate QC limits. Test reports/summary forms for blank samples; R5  $\boxtimes$ Test reports/summary forms for laboratory control samples (LCSs) including:  $\square$ R6 a) LCS spiking amounts, b) Calculated %R for each analyte, and c) The laboratory's LCS QC limits. Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:  $\boxtimes$ R7 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:  $\boxtimes$ 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;  $\boxtimes$ R10 Other problems or anomalies.  $\boxtimes$ The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.  $\boxtimes$ 

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.

E .	0	1	
Craig Bromley	lealy	nonly	Laboratory Dir
Name (Printed)	Signature		Official Title (

printed) 8/14/08

Labora	atory l	Name: TestAmerica-Houston	LRC Date: 07/30/08					
Projec	t Narr	e: 1620 HOUSTON TX- WOOD PRESERVING WORKS	aboratory Job Number: 35723	8				
-		ame: YX	Prep Batch Number(s): 402524 402765-VOA		2545,	4020	579, a	and
# <sup>1</sup>	A <sup>2</sup>	Description		Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER#
	1	Chain-of-custody (C-O-C)	,					
R1	OI	Did samples meet the laboratory's standard conditions of sample according to the standard conditions of sample accordin	entability upon receipt?	X			<u></u>	
		Were all departures from standard conditions described in an excepti				X		
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the laboratory ID	numbers?	X		*******	326333	3535335
		Are all laboratory ID numbers cross-referenced to the corresponding of		X				<u> </u>
R3	OI	Test reports	20 4444					
	+	Were all samples prepared and analyzed within holding times?		X	2000000			1
		Other than those results $<$ MQL, were all other raw values bracketed	hy calibration standards?	X				<u> </u>
		Were calculations checked by a peer or supervisor?	by current of standards?	X				
		Were all analyte identifications checked by a peer or supervisor?		X				<u> </u>
		Were sample quantitation limits reported for all analytes not detected	19	X				<b> </b>
	1	Were all results for soil and sediment samples reported on a dry weig				x		<u> </u>
		Were % moisture (or solids) reported for all soil and sediment sample				X	<u> </u>	<u> </u>
		If required for the project, TICs reported?		<b> </b> ,		X	<u> </u>	<u> </u>
R4	0	Surrogate recovery data						
	<u> </u>	Were surrogates added prior to extraction?		X	202000000			100000
		Were surrogate percent recoveries in all samples within the laborator	v OC limits?	<u></u>	x		<b> </b>	$\frac{1}{1}$
25	or	Test reports/summary forms for blank samples	y go mintor					
		Were appropriate type(s) of blanks analyzed?		X	20,02003	12000000	<u></u>	600000
	1	Were blanks analyzed at the appropriate frequency?		X				
		Were method blanks taken through the entire analytical process, includency	uding preparation and if	X			<u> </u>	<u> </u>
		applicable, cleanup procedures?	ading propuration and, it					
		Were blank concentrations < MQL?	······································	x			t	<u>+</u>
R6	OI	Laboratory control samples (LCS):						
	- <u>[~_</u>	Were all COCs included in the LCS?		X	22:32225	1222220	0200200	10000
		Was each LCS taken through the entire analytical procedure, including	19 prep and cleanup steps?	X			<b> </b>	†
		Were LCSs analyzed at the required frequency?		X	<u> </u>			1
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC	limits?	X		<u> </u>	<u> </u>	<u>†                                    </u>
		Does the detectability data document the laboratory's capability to de		X	ŀ		<u> </u>	<u>†</u>
		used to calculate the SQLs?						1
		Was the LCSD RPD within QC limits?		<b> </b>	f	X	1	1
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	*********					
	1	Were the project/method specified analytes included in the MS and M	ASD?	X		l	T	T
		Were MS/MSD analyzed at the appropriate frequency?		X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC lin	mits?	X	1			1
		Were MS/MSD RPDs within laboratory QC limits?		X		1		1
R8	OI	Analytical duplicate data	·······					
		Were appropriate analytical duplicates analyzed for each matrix?		T	ſ	X	T	T
		Were analytical duplicates analyzed at the appropriate frequency?	<u> </u>	1		X	1	1
		Were RPDs or relative standard deviations within the laboratory QC	limits?	t		X	1	T
RØ	OI	Method quantitation limits (MQLs):						
	1	Are the MQLs for each method analyte included in the laboratory dat	a package?	X	ľ		T	T
		Do the MQLs correspond to the concentration of the lowest non-zero		X	1	1	t	T
		Are unadjusted MQLs included in the laboratory data package?		X	1	1	1	t
R10	10I	Other problems/anomalies						t®
	1	Are all known problems/anomalies/special conditions noted in this L	RC and ER?	X			T	T
		Were all necessary corrective actions performed for the reported data		X	<u>†</u>	t	1	t -
		Was applicable and available technology used to lower the SQL to mi			1		1	t
	1	affects on the sample results?		1	1		1	

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.

= organic analyses; I = inorganic analyses (and general chemistry, when applicable); 2.

NA = Not applicable;
 NR = Not reviewed;

5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 4

Labo	ratory	Name: TestAmerica-Houston	LRC Date: 07/30/08					
Proje	ect Na	me: 1620 HOUSTON TX- WOOD PRESERVING WORKS	Laboratory Job Number: 357	238				
		Name: YX	Prep Batch Number(s): 402: 402765-VOA		10254	15, 40	)267	9, an
# <sup>1</sup>	A <sup>2</sup>	Description		Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER#
S1	OI	Initial calibration (ICAL)			*****			
		Were response factors and/or relative response factors for each analytic	e within OC limits?	X		******		0000000
		Were percent RSDs or correlation coefficient criteria met?		X				1
		Was the number of standards recommended in the method used for all	analytes?	X				
		Were all points generated between the lowest and highest standard us		X				
		Are ICAL data available for all instruments used?		X				
		Has the initial calibration curve been verified using an appropriate see	cond source standard?	X				İ
S2	OI	Initial and continuing calibration verification (ICCV and CCV) a			88. S.S.			
	1	Was the CCV analyzed at the method-required frequency?		X	1000/0000	0000000		0000000
		Were percent differences for each analyte within the method-required	OC limits?	X	[			†
		Was the ICAL curve verified for each analyte?		X				
		Was the absolute value of the analyte concentration in the inorganic C	$CB < MDL_2$			X		1
<b>S</b> 3	0	Mass spectral tuning:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					
		Was the appropriate compound for the method used for tuning?		X		90.0000		2000000
		Were ion abundance data within the method-required QC limits?		X				
54	0	Internal standards (IS):				Ø		
	1	Were IS area counts and retention times within the method-required (	OC limits?	X	<u>,</u>		200003000	
35	OI	Raw data (NELAC section 1 appendix A glossary, and section 5.12		1				
		Were the raw data (for example, chromatograms, spectral data) review		X			920-20920	20000000
		Were data associated with manual integrations flagged on the raw dat		X				<u> </u>
56	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?		1		X		
<b>S</b> 7	0	Tentatively identified compounds (TICs):						
********		If TICs were requested, were the mass spectra and TIC data subject to	appropriate checks?		1220102222	X		1000.0000
S8	I	Interference Check Sample (ICS) results:			***	a in		
		Were percent recoveries within method QC limits?				X	202000	
<b>5</b> 9	I	Serial dilutions, post digestion spikes, and method of standard ad	ditions					
	ŀ	Were percent differences, recoveries, and the linearity within the QC		[		X		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		X				ľ
		Is the MDL either adjusted or supported by the analysis of DCSs?		X	1			
S11	OI	Proficiency test reports:						
	1	Was the laboratory's performance acceptable on the applicable proficie	ency tests or evaluation	X				
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtained fror	n other appropriate sources?					
S13	OI	Compound/analyte identification procedures			8:83		***	
		Are the procedures for compound/analyte identification documented?		X				
514	OI	Demonstration of analyst competency (DOC)					8 X	
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC	4?	X			and the second	
		Is documentation of the analyst's competency up-to-date and on file?		X				
515	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		X				ł
S16	OI	Laboratory standard operating procedures (SOPs):						
-	1	Are laboratory SOPs current and on file for each method performed?		X	P		eccentricity	

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).

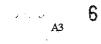
3 NA = Not applicable.

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: Excep	tion Reports
Laboratory Name: TestAmerica-Houston	LRC Date: 07/30/08
Project Name: 1620 HOUSTON TX- WOOD PRESERVING WORKS	Laboratory Job Number: 357238
Reviewer Name: YX	Prep Batch Number(s): 402524, 402545, 402679, and 402765-VOA
ER #1         DESCRIPTION           1         The 1,2-dichloroethane-d4 and 4-bromofluorobenzene surroga acceptance limits due to matrix interference.	ate recoveries in sample 357238-9 MSD were outside

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



1

i

I abor		x A (cont'd): Laboratory Review Checklist: Repo	LRC Date: 08/11/08					
				<u>^</u>				
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	****		Laboratory Job Number: 35723					
			Prep Batch Number(s): 402237					
$\#^1$	A <sup>2</sup>	Description		Yes	No	NA <sup>3</sup>	NR <sup>4</sup>	ER#
		Chain-of-custody (C-O-C)						
R1	OI	Did samples meet the laboratory's standard conditions of sample acc	eptability upon receipt?	X				
		Were all departures from standard conditions described in an except				X		
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the laboratory II	D numbers?	X		[		
		Are all laboratory ID numbers cross-referenced to the corresponding	QC data?	Х				
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		Γ		
		Were all analyte identifications checked by a peer or supervisor?		Χ		1		[
		Were sample quantitation limits reported for all analytes not detected	1?	Χ		Γ		
		Were all results for soil and sediment samples reported on a dry wei				X		
		Were % moisture (or solids) reported for all soil and sediment samp		1		X		
		If required for the project, TICs reported?		<b></b>		X		<b></b>
R4	ю	Surrogate recovery data						
	1	Were surrogates added prior to extraction?		X		1		
		Were surrogate percent recoveries in all samples within the laborato	ry QC limits?	X		1		
R5	OI	Test reports/summary forms for blank samples						
	1	Were appropriate type(s) of blanks analyzed?		X		[	l –	1
		Were blanks analyzed at the appropriate frequency?		X	<b></b>	1	1	1
		Were method blanks taken through the entire analytical process, incl	uding preparation and, if	x	1	1		İ
		applicable, cleanup procedures?	61 F	1				
		Were blank concentrations < MQL?		<b></b>	X	<b>T</b>		1
R6	OI	Laboratory control samples (LCS):						
	<u> </u>	Were all COCs included in the LCS?		X		T	T	
		Was each LCS taken through the entire analytical procedure, includi	ng prep and cleanup steps?	X	1	1	1	1
		Were LCSs analyzed at the required frequency?	······································	X		1	1	1
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC	limits?	X				<u> </u>
		Does the detectability data document the laboratory's capability to de	etect the COCs at the MDL	X		1	<u>†</u>	<u> </u>
		used to calculate the SQLs?						
		Was the LCSD RPD within QC limits?		X		1	1	[
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS and	MSD?	X		Ī		Ī
		Were MS/MSD analyzed at the appropriate frequency?		X	1	1		1
		Were MS (and MSD, if applicable) %Rs within the laboratory QC li	mits?	X	1	1	1	1
		Were MS/MSD RPDs within laboratory QC limits?		x	1	1	1	1
R8	or	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matrix?				X	T.	
		Were analytical duplicates analyzed at the appropriate frequency?		†	<u>†</u>	X	<u> </u>	1
		Were RPDs or relative standard deviations within the laboratory QC	limits?		t	X	1	<u> </u>
R9	TOI	Method quantitation limits (MQLs):						
	1	Are the MQLs for each method analyte included in the laboratory da	ta package?	X		1	<u> </u>	1
		Do the MQLs correspond to the concentration of the lowest non-zero		x	t	1	t	1
		Are unadjusted MQLs included in the laboratory data package?		x	1	1	1	<u> </u>
RIO	TOL	Other problems/anomalies						
	1	Are all known problems/anomalies/special conditions noted in this I	.RC and ER?	X	1000000	T	1	T <sup>ere</sup>
		Were all necessary corrective actions performed for the reported data		$\frac{\alpha}{X}$	1	1	1	t
		Was applicable and available technology used to lower the SQL to m				t	<b>†</b>	$\frac{1}{2}$
1		affects on the sample results?		1	1		1	1 1

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;

NR = Not reviewed;
 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

7

Labo	oratory	Name: TestAmerica-Houston	LRC Date: 08/11/08					
Proje	ect Na	me: 1620 HOUSTON TX- WOOD PRESERVING WORKS	Laboratory Job Number: 3:	57238	3			
Revi	ewer ]	Name: KA	Prep Batch Number(s): 402			10232	10.57	
#1	A <sup>2</sup>	Description						ER#
<u>"</u> S1		Initial calibration (ICAL)		108	140	INA	INK	ER#
51	- <u>[</u>	Were response factors and/or relative response factors for each analy	to mithin OO line it o					
		Were percent RSDs or correlation coefficient criteria met?	te within OC limits7	X		<b> </b>		
		Was the number of standards recommended in the method used for a	11	X				
		Were all points generated between the lowest and highest standard u		X		<u> </u>		
		Are ICAL data available for all instruments used?	ised to calculate the curve?	X		<b> </b>		
		Has the initial calibration curve been verified using an appropriate s		X X		ļ		
S2	OI			A				
54		Initial and continuing calibration verification (ICCV and CCV) Was the CCV analyzed at the method-required frequency?	and continuing calibration		000-000		<u> </u>	
		Were percent differences for each analyte within the method-require	100 limited	X			<u> </u>	
		Were percent differences for each analyte within the method-require Was the ICAL curve verified for each analyte?		X			<b> </b>	,
				X	ļ		ļ	-
<b>S</b> 3	+	Was the absolute value of the analyte concentration in the inorganic	CCB < MDL7			X	-555-555	
33	0	Mass spectral tuning:	······································	<u> </u>				
		Was the appropriate compound for the method used for tuning?		X	<b> </b>			
<b>S</b> 4		Were ion abundance data within the method-required QC limits?		X				
54	0	Internal standards (IS):						
10		Were IS area counts and retention times within the method-required		X		90000000		
S5		Raw data (NELAC section 1 appendix A glossary, and section 5.1			30.335	88.088		
		Were the raw data (for example, chromatograms, spectral data) revie		X				ļ
	<u> </u>	Were data associated with manual integrations flagged on the raw da	ita?	X				
<u>56</u>	0	Dual column confirmation	-		<u></u>			
	<u> </u>	Did dual column confirmation results meet the method-required QC	>			X		<u> </u>
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject	to appropriate checks?		000000000	X		<u> </u>
S8	<u> </u>	Interference Check Sample (ICS) results:			***		<u></u>	
		Were percent recoveries within method QC limits?				X		L
<u>59</u>	I	Serial dilutions, post digestion spikes, and method of standard a						
		Were percent differences, recoveries, and the linearity within the QC	limits specified in the			X		L
S10	OI	Method detection limit (MDL) studies						
	_	Was a MDL study performed for each reported analyte?		X			L	
		Is the MDL either adjusted or supported by the analysis of DCSs?		X				
<u>811</u>	OI	Proficiency test reports:						
	<u> </u>	Was the laboratory's performance acceptable on the applicable profic	iency tests or evaluation	X				
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	X				
513	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification documented?	>	X				
514	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC		X				
		Is documentation of the analyst's competency up-to-date and on file?		X				
S15	OI	Verification/validation documentation for methods (NELAC Cha						
		Are all the methods used to generate the data documented, verified, a	and validated, where	X				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed?		X	مريخ مي مريخ مي مريخ مي مريخ مي مريخ مي مريخ مي مريخ مي مي مي مي مي مي مي مي مي مي مي مي مي			1

Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period. O =organic analyses; I = inorganic analyses (and general chemistry, when applicable).

2 3 4 NA = Not applicable. NR = Not Reviewed.

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

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Labora	tory Name: TestAmerica-Houston	LRC Date: 08/11/08
Project	Name: 1620 HOUSTON TX- WOOD PRESERVING WORKS	Laboratory Job Number: 357238
Reviev	ver Name: KA	Prep Batch Number(s): 402237 and 402330-SV
ER # <sup>1</sup>	DESCRIPTION	
1	Naphthalene was detected above the MQL in the method blan was detected above the MDL, but below the MQL in the meth The level of detection is below the recommended reporting lin report.	nod blanks analyzed on 07/31/08 at 12:37 and 17:41. mit and the appropriate flags have been applied to the
2	The acenaphthene and fluorene SDLs for samples 357238-4, sample 357238-16 and the dibenzofuran SDLs for samples 35 were due to the dilutions necessary for analyses.	5, 14, and 16 were elevated. The naphthalene SDL for 57238-14 and 16 were elevated. All elevated SDLs

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

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	/SWMU1	LAB NUMBER		BOTTLE ORDER		ទីខ	- v	7		
<u> </u>	Pastor, Behling & Wheeler, LLC	BILL TO	Union Pacific	Raílroad		S	, , ,	•		
	Eric Matzner	INVOICE ATTN	Geoff Reeder			. (5 ±				
ADDRESS Z201 Dc	2201 Double Creek Drive	ADDRESS	24125 Aldine W	Westfield Road		<del>ر</del> بہ :				
Suite 4004	4004					د צ				
						ΣZ				
CITY/STATE/ZIP Round Rock,	Rock, TX 78664	CITY/STATE/ZIP	Spring, TX	77373-9015		0 0.				
PHONE 512-671-3434	1-3434	PHONE	281-350-7197			<del>م</del> هر				
FAX 512-671-3446	1-3446	FAX	281-350-7362			s				
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1. Received By:	T. K.	2. Received By	Charl		7 (ko (of	3. Received	Ву:			Date
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TestAmenican Representation The leader in environmental testing

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#357238

PROJECT NAME     99000484-HWPM       LAB NUMBER     BOTILE ORDER       BILL TO     Union Pacific Railroad       INVOICE ATTN     Geoff Reeder       INVOICE ATTN     Geoff Reeder       ADDRESS     24125 Aldine Westfield Road       ADDRESS     24125 Aldine Westfield Road       ADDRESS     24125 Aldine Westfield Road       ADDRESS     24135 - 9015       PHONE     281-350-7197       PHONE     281-350-7362       FAX     281-350-7362       FAX     281-350-7362       ADDRESS     281-350-7362       ADDRESS     281-350-7362       FAX     281-350-7362       ADORE     281-350-7362       ADORE     281-350-7362       ADORE     281-350-7362       FAX     281-350-7362       ADORE     281-350-7362       FAX     281-350-7362       FAX     281-350-7362       ADORE     281-350-7362       ADORE     281-350-7362       FAX     281-350-7362       ADORE     281-350-	1 9 9 9	tomet 1 A tot wattout wou	0 4 1			
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Partor, Ioniting a Wineler, LLC         BitL TO         Dirion Pacific Bailcood         E           2210 Double Creek Drive         1000165 ATIN         Gerif Reeder         E           2210 Double Creek Drive         200555         24155 Addine Westfried Road         E           12201 Double Creek Drive         200555         24155 Addine Westfried Road         E           12201 Double Creek Drive         200555         24155 Addine Westfried Road         E           152-017-354         PAR         231:350-732         E         R           152-017-354         PAR         231:350-732         E         R         R           Market Field River         Addine Reet/Field River         R         231:350-732         E         R         R         R           Market Field River         Read         231:350-732         R         R         Z         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R         R </td <td>MO</td> <td>Event1/SWMU1</td> <td>LAB NUMBER</td> <td>BOTTLE ORDER</td> <td>ទ</td> <td></td>	MO	Event1/SWMU1	LAB NUMBER	BOTTLE ORDER	ទ	
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Suite 400.         Suite 400.         Eff.(1)         Ref.(1)	ADDRESS	2201 Double Creek Drive	ADDRESS	24125 Aldine Westfield Road		
Filt         Number         Numer         Numer         Numer		Suite 4004				
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P. Marty     Shipment Method:     Airbill No.:     Required Turnhround: Ikdays       P. Marty     Shipment Method:     Airbill No.:     Required Turnhround: Ikdays       P. Marty     Shipment Method:     Airbill No.:     Required Turnhround: Ikdays       P. Marty     Shipment Method:     Airbill No.:     Required Turnhround: Ikdays       P. Marty     Shipment Method:     Airbill No.:     Required Turnhround: Ikdays       P. Marty     Date     2. Relinquished By:     Required Sy:       Name:     Date     2. Relinquished By:     Shipment       Name:     Date     3. Relinquished By:     Station       Name:     Date     3. Relinquished By:     Station       Name:     Date     3. Received By:     Station       Name:     Mark     Date     3. Received By:     Station       None:     Mark     Date     3. Received By:     Station						
P. Marty     Shipment Method:     Airbill No.:     Required TurnAround: 14days       P. Marty     Shipment Method:     Airbill No.:     Required TurnAround: 14days       P. Marty     Shipment Method:     Airbill No.:     Required TurnAround: 14days       Mane:     Date     2. Relinquished By:     Image       Name:     Delka     11me     Company Name:       Ved By:     Marty     Dage     2. Received By:       Ved By:     Marty     Dage     2. Received By:       Name:     Dage     2. Received By:     Company Mane:       Ved By:     Marty     Mare     Mare       Name:     Dage     2. Received By:     Company Mane:       Name:     Marty     Mare     Mare						
P. Molty     Shipment Method:     Airbill No.:     Required Turnhround: 14days       P. Molty     Shipment Method:     Airbill No.:     Required Turnhround: 14days       quished By:     Molty     Number     2. Relinquished By:       Name:     Date     2. Relinquished By:     Number       Name:     Defm     1 ime     Company Name:     Number       Ved By:     Monte:     Date     2. Received By:     Time       Name:     Monte:     Number     Number     Number						
P. Mathy     Shipment Method:       P. Mathy     Shipment Method:       Auished By:     Mathy       Anishi I. No.:     Required TurnAround: 14days       Auished By:     Mathy       Anne:     Date       2. Relinquished By:     Date       Mame:     Date       11     Company Name:       11     Date       Name:     Date       11     Company Name:       11     Date       12     Received By:       13     Received By:       14     Date       15     Company Name:       16     S. Received By:						
P. Marth     Shipment Method:     Airbill No.:     Required TurnAround: 14days       quished By:     Date     2. Relinquished By:     Nickor     3. Relinquished By:       quished By:     Mame:     Date     2. Relinquished By:     Nickor     3. Relinquished By:       Name:     Della     11/16/05     Date     2. Relinquished By:     Nickor     3. Relinquished By:       Name:     Della     11/16/05     Date     2. Received By:     Nickor     3. Received By:       ved By:     Date     2. Received By:     Time     Date     2. Received By:     1. Time       Name:     Mark     Date     2. Received By:     Time     Date     3. Received By:       Name:     Mark     Date     2. Received By:     Time     Company Name:       Net     Mark     Time     Company Name:     Time						
Y. Mo. V     Date     2. Relinquished By:       quished By:     Date     2. Relinquished By:       quished By:     NILLOS     Date       Name:     Della     1.160       Name:     Marceived By:     1.160       Name:     Marceived By:     1.160			t Method:	Airbill		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	J. Relinquishe	A A		1 BY: North	3. Relinquished	Date
Welther 170 Date 2. Received By: TCC and a Received By:	Company Name:			A		Time
And time Company Name: TAC Time Company Name:	1. Received By	Duran 2. C	2. Received By:	Tr Chined	3. Received By:	-
	Company Name:	N	Company Name:	12		Time

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HATN OF CUSTODY RECORD

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		PROJECT NAME	99000484-HWPW		<u>8</u> 8	82608- VOC 8270C- SVOC- ATZ	
No	Event1/SWMU1	LAB NUMBER	BOTTLE ORDER	DER	ទ	8270C-SVOC- B12	
COMPANY	Pastor, Behling & Wheeler, LLC	BILL TO	Union Pacific Railroad		ш ч-	. Same and a second second second second second second second second second second second second second second	
SEND REPORT TO	Eric Matzner	INVOICE ATTN	Geoff Reeder		IJ X	~	
ADDRESS	2201 Double Creek Drive	ADDRESS	24125 Aldine Westfield Road	ad	17		
1	Suite 4004				<u>г</u> х		
_t					x z		
CITY/STATE/ZIP	Round Rock, TX 78664	CITY/STATE/ZIP	spring, TX 77373-9015		04		
PHONE	512-671-3434	PHONE	281-350-7197		a e		
FAX	512-671-3446	FAX	281-350-7362		s		
o NO	SAMPLE DESCRIPTION	PRESI	SERV. F SAMPLE NATRIX	SAMPLE DATE SAMPLE TIME #CONTAINR A B	TE TIME #CONT	C D E F C H 1 J	K L M N O P O R
	WG-1620-1Authon-071608	121	/bleace Gud	1/16/68 1	103 S	×	
<b>`</b>	1, 12, 16,20 - 144/10 L - 174/609			//	11 22/1	KK	
	11/2-1/10- Milling- nthird				1150	XX	
5 -=	We have reacted a file of			2/	02.2/	XX X	
× .=	WCT-10-20-1 MULT - 07 1603		Ý I V		A (151)	X	
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		Shipment Method: <i>DEM</i>	- <i>ing</i> Air	Airbill No.:		Required TurnAround:	14days
1. Relinquished By:	M. LO	2. Relinquishe	ed BY:	1111=8	3. Relinquished	d By:	Date
Company Name:	A M	Company Name:	ANC I	Time 722	Company Name:		Time
1. Received By:	Turka C. K.	2. Received		N S	3. Received By:	:	Date
Company Name:	Les mere mere	Company Name:	) L	1 ime (6,23	Company Name:		Time

X321238

rpjsckl Job Sample Receipt Checklist Rep	v2
Job Number.: 357238 Location.: 57216 Check List Number.: 1 Descr Customer Job ID: Job Check List Date.: 07/17/2 Project Number.: 99000484 Project Description.: UPRR-HWPW Customer: Pastor, Behling & Wheeler, LLC Contact.: Eric	Project Manager: sgk
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? (<=6 Deg C). Y 2.9/5.6/5.2/5.1/5.3	3
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)Y	
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	1 / 10 <sup>D</sup>
Additional	A10103
Comments	$\dot{\gamma}$
Sample Custodian Signature/DateY	ι.

Page 1

Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	est Res	sults		D	Date: 8/	8/11/2008	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CUSTOMER Pastor, Behing & Wheeler, ILC	, LLC	PROJI	CT. 16.	00 HOUSTON	TX-WOOD	PRESERVII	VG ATI	PROJECT 1620 HOUSTON TX-WOOD PRESERVING ATTN Enc Matzner			
Customer Sample ID: WG-162	WG-1620-FB01-071608	×			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-001			
Date/Time Sampled: 7/16/2008	07:55				Sa	Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	<b>OFLAG</b>	3 MDL	NOL	SDL	SHND	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.00109	n	0.00109	0.00500	0.00109	mg/L	7/27/2008 02:48	402545	1.00	klv
Benzene	71-43-2	0.00112	n	0.00112	0.00500	0.00112	1/gm	7/27/2008 02:48	402545	1.00	klv
Chlorobenzene	108-90-7	0.00150	n	0.00150	0.00500	0.00150	mg/L	7/27/2008 02:48	402545	1.00	klv
Ethylbenzene	100-41-4	0.00142	D	0.00142	0.00500	0.00142	mg/L	7/27/2008 02:48	402545	1.00	klv
Methylene Chloride	75-09-2	0.00122	n	0.00122	0.00500	0.00122	mg/L	7/27/2008 02:48	402545	1.00	klv
Toluene	108-88-3	0.00138	D	0.00138	0.00500	0.00138	J/gm	7/27/2008 02:48	402545	1.00	klv
Xylenes (total)	1330-20-7	0,00302	D	0.00302	0.0150	0.00302	ng/L	7/27/2008 02:48	402545	1.00	klv
										~	
Form I			Page 14	e 14							

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Job Number: 357238		TRRP	Lat	ora	tory T	TRRP Laboratory Test Results	ults		D	Date: 8/	8/11/2008	~~~~~
CUSTOMER, Pastor, Behling & Wheeler, LLC	r, LLC	PROJE	CL	620 H	OUSTON	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	XOD PRESERVING	4G ATTN	N Eric Matzner			
Customer Sample ID: WG-162	WG-1620-FB01-071608	8				Lat	Laboratory Sample ID:	mple ID:	357238-001			
Date/Time Sampled 7/16/2008	08 07:55					Sar	Sample Matrix		Water			
Date/Time Received 7/16/2008	08 16:33											
TEST METHOD	CAS#	RESULT	Q HAG	AG	MDL	MOL	SDL	STINU	Analysis Date/Time	Batch	D.F. 2	Analys
Method: SW-8468270C, Water												
2-Methylnaphthalene	91-57-6	0.000440	n		0.000400	0.000500	0.000440	mg/L	7/31/2008 13:32	402960	1.00	maz
Acenaphthene	83-32-9	0.000330	n		0.000300	0.000500	0.000330	mg/L	7/31/2008 13:32	402960	1.00	TM&Z
Acenaphthylene	208-96-8	0.000330	D		0.000500	0.000500	0.000330	mg/L	7/31/2008 13:32	402960	1.00	maz
Anthracene	120-12-7	0.000220	D		0.000200	0.000500	0.000220	J/gm	7/31/2008 13:32	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000220	n		0.000200	0.00250	0.000220	ng/L	7/31/2008 13:32	402960	1.00	maz
Dibenzofuran	132-64-9	0.000330	D		0.000300	0.000500	0.000330	ng/L	7/31/2008 13:32	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	096000.0		 م	0.000200	0.00250	0.000220	J/gm	7/31/2008 13:32	402960	1.00	maz
Fluoranthene	206-44-0	0.000220	D		0.000200	0.000500	0.000220	mg/L	7/31/2008 13:32	402960	1.00	maz
Fluorene	86-73-7	0.000220	n		0.000200	0.000500	0.000220	mg/L	7/31/2008 13:32	402960	1.00	maz
Naphthalene	91-20-3	0.000689			0.000400	0.000500	0.000440	mg/L	7/31/2008 13:32	402960	1.00	maz
Phenanthrene	85-01-8	0.000220	D		0.000200	0.000500	0.000220	mg/L	7/31/2008 13:32	402960	1.00	maz
Phenol	108-95-2	0.000220	D		0.000200	0.000500	0.000220	mg/L	7/31/2008 13:32	402960	1.00	maz
Pyrene	129-00-0	0.000220	D		0,000200	0.000500	0.000220	ng/L	7/31/2008 13:32	402960	1.00	maz
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Job Number: 357238		TRRP	Laboı	TRRP Laboratory Test Results	est Res	sults		Ä	Date: 8/	8/11/2008	00
CUSTOMER: Pastor, Behling & Wheeler, LLC	r, HC	PROJI	ICT. 1620	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	TX- WOOD	PRESERVE	4G ATTN	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW07-071608	80			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-002			
Date/Time Sampled 7/16/2008	08 08:35				Sai	Sample Matrix	:	: Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	MDL	MOL	SDL	STINU	UNITS Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/30/2008 15:08	402765	1.00	꽤
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	mg/L	7/30/2008 15:08	402765	1.00	zŋ
Chlorobenzene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	mg/L	7/30/2008 15:08	402765	1.00	zţ
Ethylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	ng/L	7/30/2008 15:08	402765	1.00	zĮ
Methylene Chloride	75-09-2	0.000540	D	0.00122	0.00500	0.000540	ng/L	7/30/2008 15:08	402765	1.00	zIJ
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/30/2008 15:08	402765	1.00	zł
Xylenes (total)	1330-20-7	0.00127	D	0.00302	0.0150	0.00127	ng/L	7/30/2008 15:08	402765	1.00	zĮ
							14111000000000000000000000000000000000				

Job Number: 357238		TRRP	Lal	00r	atory T	TRRP Laboratory Test Results	sults		Ц	Date: 8	8/11/2008	∞
CUSTOMER Paster, Behling & Wheeler, LLC	r,LLC		3CT	16201	NOTSUO	PROJECT 1620 HOUSTON TX- WOOD PRESERVING ATTN	PRESERVI	NG ATI	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW07-071608	508				La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-002			
Date/Time Sampled	08 08:35 08 16-33					Sar	Sample Matrix		: Water			
	V C	PPCIT T	O FI AC	γCI	MIN	NOI	cni	STINI	Andreie Pris/Tima	A Datab	au	Annha
Method: SW-846 8270C, Water			; /			42	4					67.00
2-Methylnaphthalene	91-57-6	0.000390	n		0.000400	0.000500	0.000390	ng/L	7/31/2008 13:59	402960	1.00	maz
Acenaphthene	83-32-9	0.000290	D		0.000300	0.000500	0.000290	mg/L	7/31/2008 13:59	402960	1.00	maz
Acenaphthylene	208-96-8	0.000440	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		0.000500	0.000500	0.000290	mg/L	7/31/2008 13:59	402960	1.00	maz
Anthracene	120-12-7	0.000982			0.000200	0.000500	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maZ
bis(2-ethylhexyl)phthalate	117-81-7	0.000190	n		0.000200	0.00250	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maz
Dibenzofuran	132-64-9	0.000290	n		0.000300	0.000500	0.000290	ng/L	7/31/2008 13:59	402960	1.00	ZBUI
Fluoranthene	206-44-0	0.000190	D		0.000200	0.000500	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maz
Fluorene	86-73-7	0.000190	D		0.000200	0.000500	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maz
Naphthalene	91-20-3	0.000675		 	0.000400	0.000500	0.000390	mg/L	7/31/2008 13:59	402960	1.00	maz
Phenanthrene	85-01-8	0.000360	ŗ		0.000200	0.000500	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maz
Pyrene	129-00-0	0.000190	D		0.000200	0.000500	0.000190	mg/L	7/31/2008 13:59	402960	1.00	maz
					anonace and a second and a second second second second second second second second second second second second							when the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of the concerned of t

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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	Cest Rec	sults			Date: 8	8/11/2008	×
CUSTOMER Pastor, Behling & Wheeler, I.I.C	ШС		3CT. 162	0 HOUSTON	TX-WOOD	PRESERVI	NG AT	PROJECT 1620 HOUSTON TX- WOOD PRESERVING ATTN Eric Matzner			
Customer Sample ID: WG-162	WG-1620-P10-071608				La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-003			
Date/Time Sampled7/16/2008Date/Time Received7/16/2008	38 09:08 38 16:33				Sa	Sample Matrix Water		Water			
TEST METHOD	CAS#	RESULT	0 FLAG	MDL	MOL	SDL	<b>UNITS</b>	Analysis Date/Time	e  Batch	DF	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/30/2008 15:33	402765	1.00	돼
Benzene	71-43-2	0.000250	n	0.00112	0.00500	0.000250	mg/L	7/30/2008 15:33	402765	1.00	IJz
Chlorobenzene	108-90-7	0.000470	n	0.00150	0.00500	0.000470	mg/L	7/30/2008 15:33	402765	1.00	zIJ
Ethylbenzene	100-41-4	0.000250	n	0.00142	0.00500	0.000250	mg/L	7/30/2008 15:33	402765	1.00	zIJ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/30/2008 15:33	402765	1.00	ŢĮ
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/30/2008 15:33	402765	1.00	멅
Xylenes (total)	1330-20-7	0.00127	D	0.00302	0.0150	0.00127	mg/L	7/30/2008 15:33	402765	1.00	zIJ
Form I			Page 18	18							

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Iob Number 357238		TRRP	Lal	ora	tory T	TRRP Laboratory Test Results	ults			Date: 8	8/11/2008	8
CUSTOMER Pastor, Behing & Wheeler, LLC	r, LLC	PROJE	ĊŢ	l620 H	OUSTON"	IX- WOOD	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	NG ATTN	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-P10-071608					Lal	ooratory Sa	mple ID:	Laboratory Sample ID: 357238-003			
Date/Time Sampled 7/16/2008	80:60 80					Sar	Sample Matrix		Water			
Date/Time Received 7/16/2008	08 16:33											
TEST METHOD	CAS#	RESULT	0 FLAG	-AG	MDL	MOL	SDL	STINU	Analysis Date/Time	e Batch	D.F.	Analyst
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.0106			0.000300	0.000500	0.000320	mg/L	7/31/2008 14:27	402960	1.00	maz
Acenaphthylene	208-96-8	0.000530		<u> </u>	0.000500	0.000500	0.000320	mg/L	7/31/2008 14:27	402960	1.00	maz
Anthracene	120-12-7	0.000747			0.000200	0.000500	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000220	<del>ر</del> سر		0.000200	0.00250	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Dibenzofuran	132-64-9	0.00176			0.000300	0.000500	0.000320	mg/L	7/31/2008 14:27	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	0.000920	, 	٩	0.000200	0.00250	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Fluoranthene	206-44-0	0.000220	5		0.000200	0.000500	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Fluorene	86-73-7	0.00245			0.000200	0.000500	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Naphthalene	91-20-3	0.000790.		<u>م</u>	0.000400	0.000500	0.000420	mg/L	7/31/2008 14:27	402960	1.00	maz
Phenol	108-95-2	0.000210	D		0.000200	0.000500	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Pyrene	129-00-0	0.000210	D		0.000200	0.000500	0.000210	mg/L	7/31/2008 14:27	402960	1.00	maz
Terresconcerences and the second second second second second second second second second second second second s				Dario 19								

0000250 11 14 1 1		TRRP	Labo	ratory 7	P Laboratory Test Results	sults			Date: 8/	8/11/2008	8
CUSTOMER Pastor Behing & Wheeler LLC	r, tLC	PROJI	3CT. 162	0 HOUSTON	TX- WOOD	PRESERVII	Q ATI	PROJECT. 1620 HOUSTON TX- WOOD PRESERVING ATTN End Matzner			
Customer Sample ID: WG-162	WG-1620-MW01A-071608	1608			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-004			
Date/Time Sampled 7/16/2008	08 09:41				Sa	Sample Matrix		Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	<b>OFLAG</b>	3 MDL	MQL	SDL	STINU	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	D	0.00109	0.00500	0.000520	mg/L	7/30/2008 15:59	402765	1.00	ŢĮ
Benzene	71-43-2	0.000250	n	0.00112	0.00500	0.000250	mg/L	7/30/2008 15:59	402765	1.00	zIJ
Chlorobenzene	108-90-7	0.000470	n	0.00150	0.00500	0.000470	mg/L	7/30/2008 15:59	402765	1.00	멅
Ethylbenzene	100-41-4	0.000250	n	0.00142	0.00500	0.000250	ng/L	7/30/2008 15:59	402765	1.00	堀
Methylene Chloride	75-09-2	0.000540	D	0.00122	0.00500	0.000540	mg/L	7/30/2008 15:59	402765	1.00	zIJ
Toluene	108-88-3	0.000410	D	0.00138	0.00500	0.000410	mg/L	7/30/2008 15:59	402765	1.00	IJZ
Xylenes (total)	1330-20-7	0.00127	D	0.00302	0.0150	0.00127	mg/L	7/30/2008 15:59	402765	1.00	Ţ

Form

Job Number: 357238		TRRP	Labo	oratory	TRRP Laboratory Test Results	esults		Â	Date: 8/	8/11/2008	
CUSTOMER Pastor, Behing & Wheeler, LIC	r, LLC	РКОЛ	ICT. 16.	ISUOH 03	ON TX- WO	D PRESERV	NG AT	PROJECT 1620 HOUSTON TX WOOD PRESERVING ATTN Enc Matzmet			
Customer Sample ID: WG-162	WG-1620-MW01A-071608	1608		·		Laboratory S	ample ID:	Laboratory Sample ID: 357238-004			
Date/Time Sampled 7/16/2008	08 09:41					Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	G MDL	MQL	SDL	SHIND	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 8270C, Water											
2-Methylnaphthalene	91-57-6	0.0109		0.000400	00 0.000500	0.000390	mg/L	7/31/2008 14:55	402960	1.00	maz
Acenaphthene	83-32-9	0.126		0.000300	00 0.000500	0.00290	mg/L	8/1/2008 15:47	402960	10.0	maz
Acenaphthylene	208-96-8	0.00143		0.000500	00 0.000500	0.000290	T/gm	7/31/2008 14:55	402960	1.00	maz
Anthracene	120-12-7	0.00267		0.000200	00 0.000500	0.000190	ng/L	7/31/2008 14:55	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.00137	ŗ	0.000200	00 0.00250	0.000190	ng/L	7/31/2008 14:55	402960	1.00	maz
Dibenzofuran	132-64-9	0.00774		0.000300	00 0.000500	0.000290	J/gm	7/31/2008 14:55	402960	1.00	maz
Fluoranthene	206-44-0	0.00923		0.000200	00 0.000500	0.000190	mg/L	7/31/2008 14:55	402960	1.00	maz
Fluorene	86+73+7	0.0659		0.000200	00 0.000500	0.000970	ng/L	8/1/2008 12:39	402960	5.00	maz
Naphthalene	91-20-3	0.0168	م	0.000400	00 0.000500	0.000390	J/gm	7/31/2008 14:55	402960	1.00	maz
Phenanthrene	85-01-8	0.00177		0.000200	00 0.000500	0.000190	mg/L	7/31/2008 14:55	402960	1.00	maz
Pyrene	129-00-0	0.00417		0.000200	00 0.000500	0.000190	∏/∂ш	7/31/2008 14:55	402960	1.00	maz
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Job Number: 357238		TKKP	Laboi	atory	IKKP Laboratory lest Kesults	ults		Д	Date: 8	8/11/2008	. 8
CUSTOMER: Pastor, Behing & Wheeler, I.I.C	LLC	PROH	SCT 1620	HOUSTON	PROJECT: 1620 HOUSTON TX- WOOD PRESERVING	PRESERVI	NG ATIN	N Eric Matzner			
Customer Sample ID: WG-162	WG-1620-FD01-071608	8			Lal	ooratory Sa	mple ID:	Laboratory Sample ID: 357238-005			
Date/Time Sampled 7/16/2008	00:00 80				Sar	Sample Matrix		: Water			
Date/Time Received 7/16/2008	8 16:33										
TEST METHOD	CAS#	RESULT	0 FLAG	MDL	MOL	SDL	SHNU	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/30/2008 16:24	402765	1.00	zIJ
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	ng/L	7/30/2008 16:24	402765	1.00	IJz
Chloroben zene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	ng/L	7/30/2008 16:24	402765	1.00	zIJ
Ethylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	ng/L	7/30/2008 16:24	402765	1.00	zĮ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	ng/L	7/30/2008 16:24	402765	1.00	IJz
Toluene	108-88-3	0.000410	D	0.00138	0.00500	0.000410	ng/L	7/30/2008 16:24	402765	1.00	Ţ
Xylenes (total)	1330-20-7	0.00127	n	0.00302	0.0150	0.00127	mg/L	7/30/2008 16:24	402765	1.00	IJz
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Job Number: 357238		TRRP	Labo	oratory	TRRP Laboratory Test Results	esults		Q	Date: 8,	8/11/2008	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CUSTOMER. Pastor, Behling & Wheeler, ILC	, LLC	PROJE	CT 16	20 HOUST	PROJECT. 1620 HOUSTON TX- WOOD PRESERVING	D PRESERV	NG ATIN	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-FD01-071608	8			Ι	aboratory Sa	ample ID:	Laboratory Sample ID: 357238-005			
Date/Time Sampled 7/16/2008	00:00 80				LU.	Sample Matrix Water	X	Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	G MDL	MQL	SDL	UNITS	UNITS Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 8270C, Water											
2-Methyinaphthalene	91-57-6	0.00224		0.000400	00 0.000500	0,000390	mg/L	7/31/2008 15:22	402960	1.00	maz
Acenaphthene	83-32-9	0.119		0.000300	00 0.000500	0.00150	mg/L	8/1/2008 13:05	402960	5.00	maz
Acenaphthylene	208-96-8	0.00135		0.000500	00 0.000500	0.000290	mg/L	7/31/2008 15:22	402960	1.00	maz
Anthracene	120-12-7	0.00232		0.000200	00 0.000500	0.000200	mg/L	7/31/2008 15:22	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.00126	<b>ئ</b> سز	0.000200	00 0.00250	0.000200	mg/L	7/31/2008 15:22	402960	1.00	maz
Dibenzofuran	132-64-9	0.00163		0.000300	00 0.000500	0.000290	ng/L	7/31/2008 15:22	402960	1.00	TMAZ
Fluoranthene	206-44-0	0.00836		0.000200	00 0.000500	0.000200	mg/L	7/31/2008 15:22	402960	1.00	maz
Fluorene	86-73-7	0.0551		0.000200	00 0.000500	0.000980	mg/L	8/1/2008 13:05	402960	5.00	maz
Naphthalene	91-20-3	0.00312	<u>م</u>	0.000400	00 0.000500	0.000390	mg/L	7/31/2008 15:22	402960	1.00	maz
Phenanthrene	85-01-8	0.000783		0.000200	00 0.000500	0.000200	J/gm	7/31/2008 15:22	402960	1.00	maz
Pyrene	129-00-0	0.00375		0.000200	00 0.000500	0.000200	mg/L	7/31/2008 15:22	402960	1.00	maz
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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	lest Res	sults		ğ	Date: 8,	8/11/2008	∞
CUSTOMER Pastor, Behing & Wheeler, LLC	r, LLC		3CT 162	PROJECT 1620 HOUSTON TX WOOD PRESERVING	TX- WOOD	PRESERVI		ATTN Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW08-071608	508			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-006			
Date/Time Sampled 7/16/2008	08 10:55				Saı	Sample Matrix Water	· · · · · · · · · · · · · · · · · · ·	Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	a MDL	MOL	SDL	STINU	Analysis Date/Time Batch	Batch	D.F.	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.00109	n	0.00109	0.00500	0.00109	mg/L	7/29/2008 23:03	402679	1.00	klv
Benzene	71-43-2	0.00112	p	0.00112	0.00500	0.00112	mg/L	7/29/2008 23:03	402679	1.00	klv
Chlorobenzene	108-90-7	0.00150	n	0.00150	0.00500	0.00150	mg/L	7/29/2008 23:03	402679	1.00	klv
Ethylbenzene	100-41-4	0.00142	n	0.00142	0.00500	0.00142	ng/L	7/29/2008 23:03	402679	1.00	klv
Methylene Chloride	75-09-2	0.00122	n	0.00122	0.00500	0.00122	mg/L	7/29/2008 23:03	402679	1.00	klv
Toluene	108-88-3	0.00138	D	0.00138	0.00500	0.00138	тg/L	7/29/2008 23:03	402679	1.00	klv
Xylenes (total)	1330-20-7	0.00302	D	0.00302	0.0150	0.00302	mg/L	7/29/2008 23:03	402679	1.00	klv
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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	lest Re	sults		D	Date: 8/	8/11/2008	
CUSTOMER: Pastor, Behling & Wheeler, LLC	, LLC	PROJI	SCT. 162	PROJECT. 1620 HOUSTON TX- WOOD PRESERVING ATTN	TX-WOOD	PRESERVI	NG ATI	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW08-071608	508			La	boratory Sa	imple ID:	Laboratory Sample ID: 357238-006			
Date/Time Sampled 7/16/2008	08 10:55				Sa	Sample Matrix		: Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	0 FLAG	F NDL	MOL	SDL	SHNI	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 8270C, Water											
2-Methylnaphthalene	91-57-6	0,000400	n	0.000400	0.000500	0.000400	mg/L	7/31/2008 18:37	402960	1.00	Zem
Acenaphthene	83-32-9	0.000300	n	0.000300	0.000500	0.000300	mg/L	7/31/2008 18:37	402960	1.00	maz
Acenaphthylene	208-96-8	0.000440	<b>F</b> .,	0.000500	0.000500	0.000300	mg/L	7/31/2008 18:37	402960	1.00	maz
Anthracene	120-12-7	0,000669		0.000200	0.000500	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000200	n	0.000200	0.00250	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
Dibenzofuran	132-64-9	0.000300	n	0.000300	0.000500	0.000300	mg/L	7/31/2008 18:37	402960	1.00	maz
Fluoranthene	206-44-0	0.000200	n	0.000200	0.000500	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
Fluorene	86-73-7	0.000200	D	0.000200	0.000500	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
Naphthalene	91-20-3	0.000654		0.000400	0.000500	0.000400	mg/L	7/31/2008 18:37	402960	1.00	maz
Phenanthrene	85-01-8	0.000360	<b></b> ,	0.000200	0.000500	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
Pyrene	129-00-0	0.000200	D	0.000200	0.000500	0.000200	mg/L	7/31/2008 18:37	402960	1.00	maz
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Job Number: 357238	c z	TRRP	Labor	TRRP Laboratory Test Results	est Rec	sults	20 20 20	RP Laboratory Test Results	Date: 8	8/11/2008	×
	<b>1</b> 1.		BU 1. 1020	NOICONE	1 A- WLAU	T NE DEN VI		N. DIK MAKING			
÷	P12-				La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-007			
Date/Time Sampled7/16/2008Date/Time Received7/16/2008	08 11:25 08 16:33				Sai	Sample Matrix Water		Water			
TEST METHOD	CAS#	RESULT	Q FLAG	MDL	MOL	SDL	CNITS	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	BTTA
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.00109	n	0.00109	0.00500	0.00109	mg/L	7/29/2008 23:36	402679	1.00	klv
Benzene	71-43-2	0.00112	n	0.00112	0.00500	0.00112	mg/L	7/29/2008 23:36	402679	1.00	klv
Chlorobenzene	108-90-7	0.00150	n	0.00150	0.00500	0.00150	J/gm	7/29/2008 23:36	402679	1.00	klv
Ethylbenzene	100-41-4	0.00142	þ	0.00142	0.00500	0.00142	ng/L	7/29/2008 23:36	402679	1.00	klv
Methylene Chloride	75-09-2	0.00122	D	0.00122	0.00500	0.00122	J/gm	7/29/2008 23:36	402679	1.00	klv
Toluene	108-88-3	0.00138	D	0.00138	0.00500	0.00138	1/âm	7/29/2008 23:36	402679	1.00	klv
Xylenes (total)	1330-20-7	0.00302	n	0.00302	0.0150	0.00302	mg/L	7/29/2008 23:36	402679	1.00	klv
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Job Number: 357238		TRRP	Lal	30r2	tory T	TRRP Laboratory Test Results	sults		Δ	Date: 8	8/11/2008	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CUSTOMER. Pastor, Behling & Wheeler, ILC	. LLC	PROJI	Ċ	1620 F	NOLSIOI	IX. WOOD	PROJECT. 1620 HOUSTON TX- WOOD PRESERVING ATTN	NG ATI	N Eric Matener			
Customer Sample ID: WG-162	WG-1620-P12-071608					La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-007			
Date/Time Sampled 7/16/2008	08 11:25					Sai	Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33											
TEST METHOD	CAS#	RESULT	Q FLAG	AG	MDL	MOL	SDL	STINU	UNITS Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0.000300	D		0.000300	0.000500	0.000300	mg/L	7/31/2008 19:04	402960	1.00	maz
Acenaphthylene	208-96-8	0.000300	n		0.000500	0.000500	0.000300	mg/L	7/31/2008 19:04	402960	1.00	maz
Anthracene	120-12-7	0.000552			0.000200	0.000500	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000340			0.000200	0.00250	0.000200	ng/L	7/31/2008 19:04	402960	1.00	maz
Dibenzofuran	132-64-9	0.000300	n		0.000300	0.000500	0.000300	ng/L	7/31/2008 19:04	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	0.000850	<del>بر</del>	ъ	0.000200	0.00250	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
Fluoranthene	206-44-0	0.000200	D		0.000200	0.000500	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
Fluorene	86-73-7	0.000200	D		0.000200	0.000500	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
Naphthalene	91~20~3	0.000626		,	0.000400	0.000500	0.000400	mg/L	7/31/2008 19:04	402960	1.00	maz
Phenol	108-95-2	0.000200	D		0.000200	0.000500	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
Pyrene	129-00-0	0.00211			0.000200	0.000500	0.000200	mg/L	7/31/2008 19:04	402960	1.00	maz
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Job Number: 357238		TRRP	Labor	TRRP Laboratory Test Results	est Re	sults		Д	Date: 8,	8/11/2008	80
CUSTOMER Pastor, Behing & Wheeler, I.I.C	r, LLC	PROJE	CT 1620	HOUSTON	TX-WOOD	PRESERVI	NG ATI	PROJECT 1620 HOUSTON TX. WOOD PRESERVING ATTN: End Matemet			
Customer Sample ID: WG-162	WG-1620-P12-071608 MS	MS			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-008			
Date/Time Sampled 7/16/2008	08 11:25				Sa	Sample Matrix Water	ζ	Water			
Date/Time Received 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	0 FLAG	MDL	MOL	SDL	SHND	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.0386		0.00109	0.00500	0.00109	mg/L	7/26/2008 18:33	402545	1.00	klv
Benzene	71-43-2	0.0509		0.00112	0.00500	0.00112	mg/L	7/26/2008 18:33	402545	1.00	klv
Chlorobenzene	108-90-7	0.0564		0.00150	0.00500	0.00150	mg/L	7/26/2008 18:33	402545	1.00	klv
Ethylbenzene	100-41-4	0.0569		0.00142	0.00500	0.00142	mg/L	7/26/2008 18:33	402545	1.00	klv
Methylene Chloride	75-09-2	0.0412		0.00122	0.00500	0.00122	mg/L	7/26/2008 18:33	402545	1.00	klv
Toluene	108-88-3	0.0556		0.00138	0.00500	0.00138	mg/L	7/26/2008 18:33	402545	1.00	klv
Xylenes (total)	1330-20-7	0.167		0.00302	0.0150	0.00302	mg/L	7/26/2008 18:33	402545	1.00	klv
Form I			Page 28	8							

Job Number: 357238		TRRP Laboratory Test Results	abora	ttory T	est Res	sults		Д	Date: 8	8/11/2008	8
CUSTOMER Pastor, Behling & Wheeler, LLC	, LLC	PROIEC	L 1620 H	OUSTON	IX-WOOD	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	NG ATIN	N Eric Matzner			
Customer Sample ID: WG-162	WG-1620-P12-071608 MS	MS			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-008			
Date/Time Sampled 7/16/2008	08 11:25				Sa	Sample Matrix		Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT 0	0 FLAG	MDL	MOL	SDL	UNITS	Analysis Date/Time Batch	e Batch	D.F	Analyst
Method: SW-846 8270C, Water											
Acenaphthene	83-32-9	0.00756		0.000300	0.000500	0.000290	mg/L	7/31/2008 19:32	402960	1.00	maz
Acenaphthylene	208-96-8	0.00715		0.000500	0.000500	0.000290	mg/L	7/31/2008 19:32	402960	1.00	Zem
Anthracene	120-12-7	0.00699		0.000200	0.000500	061000.0	mg/L	7/31/2008 19:32	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.00606		0.000200	0.00250	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
Dibenzofuran	132-64-9	0.00800		0.000300	0.000500	0.000290	mg/L	7/31/2008 19:32	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	0.00775		0.000200	0.00250	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
Fluoranthene	206-44-0	0.00849		0.000200	0.000500	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
Fluorene	86-73-7	0.00769		0.000200	0.000500	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
Naphthalene	91-20-3	0.00630		0.000400	0.000500	0.000380	mg/L	7/31/2008 19:32	402960	1.00	maz
Phenol	108-95-2	0.00298		0.000200	0.000500	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
Pyrene	129-00-0	0.00962		0.000200	0.000500	0.000190	mg/L	7/31/2008 19:32	402960	1.00	maz
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Job Number: 357238		TRRP L	TRRP Laboratory Test Results	r Test Re	sults		Д	Date: 8	8/11/2008	80
CUSTOMER Pastor, Behing & Wheeler, LLC		PROJECT	PROJECT. 1620 HOUSTON TX: WOOD PRESERVING	IOOM-XL NC	<b>J PRESERVI</b>	NG AT	ATTN Enc Marzner			
Customer Sample ID: WG-162	WG-1620-P12-071608 MSD	MSD		Ľ	aboratory S <sup>2</sup>	unple ID:	Laboratory Sample ID: 357238-009			
Date/Time Sampled 7/16/2008	08 11:25			Š	Sample Matrix		: Water			
Date/Time Received 7/16/2008	08 16:33									
TEST METHOD	CAS#	RESULT  Q	QFLAG MDL	MOL	SDL	SLIND	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water										
Separatory Funnel Liq/Liq Extraction	NA	Complete				N/A	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water										
1,2-Dichloroethane	107-06-2	0.0320	0.00109	9 0.00500	0.00109	ng/L	7/26/2008 18:57	402545	1.00	klv
Benzene	71-43-2	0.0512	0.00112	2 0.00500	0.00112	ng/L	7/26/2008 18:57	402545	1.00	klv
Chlorobenzene	108-90-7	0.0572	0.00150	0 0.00500	0.00150	mg/L	7/26/2008 18:57	402545	1.00	klv
Ethylbenzene	100-41-4	0.0609	0.00142	2 0.00500	0.00142	1/gm	7/26/2008 18:57	402545	1.00	klv
Methylene Chloride	75-09-2	0.0360	0.00122	2 0.00500	0.00122	mg/L	7/26/2008 18:57	402545	1.00	klv
Toluene	108-88-3	0.0595	0.00138	8 0.00500	0.00138	тg/L	7/26/2008 18:57	402545	1.00	klv
Xylenes (total)	1330-20-7	0.176	0.00302	2 0.0150	0.00302	mg/L	7/26/2008 18:57	402545	1.00	klv
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Job Number: 357238		TRRP Laboratory Test Results	Jabora	tory T	est Res	sults		Q	Date: 8,	8/11/2008	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
CUSTOMER. Pastor, Behing & Whetler, LLC	r, LLC	PROJEC	T. 1620 H	NOISIC	IX-WOOD	PROJECT. 1620 HOUSTON TX. WOOD PRESERVING	VG ATTN	N Eric Matzner			
Customer Sample ID: WG-162	WG-1620-P12-071608 MSD	MSD :			La	ooratory Sa	mple ID:	Laboratory Sample ID: 357238-009			
Date/Time Sampled 7/16/2008	08 11:25				Saı	Sample Matrix		Water			tt
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT O	Q FLAG	MDL	MOL	SDL	SHNU	UNITS Analysis Date Time	Batch	D.F	Analyst
Method: SW-846 8270C, Water											
Acenaphthene	83-32-9	0.00664		0.000300	0.000500	0.000300	mg/L	7/31/2008 20:00	402960	1.00	maz
Acenaphthylene	208-96-8	0.00603		0.000500	0.000500	0.000300	mg/L	7/31/2008 20:00	402960	1.00	ZeIII
Anthracene	120-12-7	0.00726	-	0.000200	0.000500	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.00651		0.000200	0.00250	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
Dibenzofuran	132-64-9	0.00727		0.000300	0.000500	0.000300	mg/L	7/31/2008 20:00	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	0.00847		0.000200	0.00250	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
Fluoranthene	206-44-0	0.00900		0.000200	0.000500	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
Fluorene	86-73-7	0.00730		0.000200	0.000500	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
Naphthalene	91-20-3	0.00567		0.000400	0.000500	0.000400	mg/L	7/31/2008 20:00	402960	1.00	maz
Phenol	108-95-2	0.00286		0.000200	0.000500	0.000200	mg/L	7/31/2008 20:00	402960	1.00	maz
Pyrene	129-00-0	0.00998		0.000200	0.000500	0.000200	ng/L	7/31/2008 20:00	402960	1.00	maz
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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	est Re	sults			Date: 8	8/11/2008	8
CUSTOMER Pastor, Behing & Wheeler, ILC	r, LLC		CT 162	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	TX- WOOD	PRESERVI	NG ATTN.	N Eric Matzner			
Customer Sample ID: WG-162	WG-1620-FD02-071608	80			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-010			
	00:00 80				Sa	Sample Matrix Water		Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	MDL	NOL	SDL	UNITS	Analysis Date/Time	e Batch	D.F.	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/22/2008 14:45	402237	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/26/2008 18:55	402524	1.00	돼
Benzene	71-43-2	0.000250	n	0.00112	0.00500	0.000250	mg/L	7/26/2008 18:55	402524	1.00	ŢĮ
Chlorobenzene	108-90-7	0.000470	n	0.00150	0.00500	0.000470	mg/L	7/26/2008 18:55	402524	1.00	뫼
Ethylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	mg/L	7/26/2008 18:55	402524	1.00	ŢĮ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/26/2008 18:55	402524	1.00	ŢĮ
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/26/2008 18:55	402524	1.00	ŢĮ
Xylenes (total)	1330-20-7	0.00127	n	0.00302	0.0150	0.00127	mg/L	7/26/2008 18:55	402524	1.00	zŋ
Form I			Page 32	32							

Job Number: 357238		TRRP	La	bor	atory T	TRRP Laboratory Test Results	sults		Ä	Date: 8,	8/11/2008	ø
CUSTOMER. Pastor, Behing & Wheeler, LIC	r, LLC	PROJ	CT	1620]	NOLSIOF	IX-WOOD	PRESERVE	NG ATI	PROJECT. 1620 HOUSTON IN- WOOD PRESERVING ATTN Enc Maizner			
Customer Sample ID: WG-162	WG-1620-FD02-071608	80				La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-010			
Date/Time Sampled 7/16/2008	08 00:00					Sa	Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33											
TEST METHOD	CAS#	RESULT	0 FLAG	AG	MDL	MOL	SDL	STINU	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 8270C, Water												
Acenaphthene	83-32-9	0,000300	D		0.000300	0.000500	0.000300	mg/L	7/31/2008 15:50	402960	1.00	maz
Acenaphthylene	208-96-8	0.000300	D		0.000500	0.000500	0.000300	mg/L	7/31/2008 15:50	402960	1.00	maz
Anthracene	120-12-7	0.000566			0.000200	0.000500	0.000200	J/gm	7/31/2008 15:50	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000640	<del>بر</del>		0.000200	0.00250	0.000200	mg/L	7/31/2008 15:50	402960	1.00	maz
Dibenzofuran	132-64-9	0.000300	D		0.000300	0.000500	0.000300	ng/L	7/31/2008 15:50	402960	1.00	maz
Di-n-butyl Phthalate	84-74-2	0.000870	<del>بر</del>	 م	0.000200	0.00250	0.000200	J/gm	7/31/2008 15:50	402960	1.00	maz
Fluoranthene	206-44-0	0.000200	D		0.000200	0.000500	0.000200	mg/L	7/31/2008 15:50	402960	1.00	maz
Fluorene	86-73-7	0.000200	D		0.000200	0.000500	0.000200	тg/L	7/31/2008 15:50	402960	1.00	maz
Naphthalene	91-20-3	0.000639		q	0.000400	0.000500	0.000400	mg/L	7/31/2008 15:50	402960	1.00	78m
Phenol	108-95-2	0.000200	D		0.000200	0.000500	0.000200	J/gm	7/31/2008 15:50	402960	1.00	maz
Pyrene	129-00-0	0.00166			0.000200	0.000500	0.000200	J/gm	7/31/2008 15:50	402960	1.00	maz
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		TRRP	Iahu	TRRPI aboratory Test Results	Pect Re	culte					
Job Number: 357238 CUSTOMER Pastor Behine & Wheeler 117	JII					Cuttor	NG AT	D	Date: 8	8/11/2008	8(
	.TB0	8			Ţ	aboratory Sa	umple ID:	Laboratory Sample ID: 357238-011			
Date/Time Sampled: //16/2008	08 00:00 08 16:33				ŭ	umple Matri		Sample Matrix Trip Blank			
33366	Ϋ́	R FSIII T	O FI AG	si MDI	ICW	SDI	STINIT	Analysis True Time Bairk	Antes	au	Andree
Method: SW-846 8260B, Water					×	1				i	
1,2-Dichloroethane	107-06-2	0.000520	D	0.00109	0.00500	0.000520	ngL	7/26/2008 17:40	402524	1.00	Ŕ
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	mg/L	7/26/2008 17:40	402524	1.00	zţ
Chlorobenzene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	mg/L	7/26/2008 17:40	402524	1.00	zŲ
Ethylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	mg/L	7/26/2008 17:40	402524	1.00	zIJ
Methylene Chloride	75-09-2	0.000540	D	0.00122	0.00500	0.000540	mg/L	7/26/2008 17:40	402524	1.00	zIJ
Tolucne	108-88-3	0.000410	D	0.00138	0.00500	0.000410	mg/L	7/26/2008 17:40	402524	1.00	zţ
Xylenes (total)	1330-20-7	0.00127	D	0.00302	0.0150	0.00127	mg/L	7/26/2008 17:40	402524	1.00	zŲ
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Job Number: 357238		TRRP	Lab	TRRP Laboratory Test Results	Fest Re	sults		Q	Date: 8	8/11/2008	8
CUSTOMER Pastor, Behling & Wheeler, ILC	r, LLC	PROJ	3CT 16	20 HOUSTON	TX-WOOD	PRESERVI	NG ATI	PROJECT 1620 HOUSTON TX- WOOD PRESERVING ATTN: Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW02-071608	508			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-012			
Date/Time Sampled 7/16/2008	08 10:59				Sa	Sample Matrix Water	4	Water			
Date/Time Received: 7/16/2008	08 16:33					ı					
TEST METHOD	CAS#	RESULT	Q FLAG	G MDL	MOL	SDL	<b>UNITS</b>	Analysis Date/Time	Batch	DF	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					NA	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/26/2008 18:30	402524	1.00	zĮ
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	mg/L	7/26/2008 18:30	402524	1.00	Ţ
Chlorobenzene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	mg/L	7/26/2008 18:30	402524	1.00	zţĮ
Ethylbenzene	100-41-4	0.000250	n	0.00142	0.00500	0.000250	J/gm	7/26/2008 18:30	402524	1.00	ъ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/26/2008 18:30	402524	1.00	ця.
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/26/2008 18:30	402524	1.00	zų
Xylenes (total)	1330-20-7	0.00127	n	0.00302	0.0150	0.00127	mg/L	7/26/2008 18:30	402524	1.00	ъ
Form I			Page 35	35							

Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	lest Re	sults			Date: 8	8/11/2008	×
CUSTOMER Pastor, Behling & Wheeler, LLC	.IIC	PROJ	3CT 16.	PROJECT 1620 HOUSTON TX- WOOD PRESERVING	TX-WOOD	PRESERVI	NG ATTN.	N. Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW02-071608	508			La	boratory Sa	umple ID:	Laboratory Sample ID: 357238-012			
Date/Time Sampled7/16/2008Date/Time Received7/16/2008	<ul><li>10:59</li><li>16:33</li></ul>				Sa	Sample Matrix Water		Water			
TEST METHOD	CAS#	RESULT	0 FLAG	3 MDL	MOL	SDL	<b>UNITS</b>	Analysis Date/Time	c Batch	D.P.	Analyst
Method: SW-846 8270C, Water											
2-Methylnaphthalene	91-57-6	0.000390	n	0.000400	0.000500	0.000390	mg/L	8/1/2008 13:32	402960	1.00	maz
Acenaphthene	83-32-9	0.0218		0.000300	0.000500	0.000290	mg/L	8/1/2008 13:32	402960	1.00	maz
Acenaphthylene	208-96-8	0.000300		0.000500	0.000500	0.000290	mg/L	8/1/2008 13:32	402960	1.00	maz
Anthracene	120-12-7	0.000420		0.000200	0.000500	0.000190	ng/L	8/1/2008 13:32	402960	1.00	ZBUI
bis(2-ethylhexyl)phthalate	117-81-7	0.000190	n	0.000200	0.00250	0.000190	mg/L	8/1/2008 13:32	402960	1.00	maz
Dibenzofuran	132-64-9	0.00673		0.000300	0.000500	0.000290	mg/L	8/1/2008 13:32	402960	1.00	maz
Fluoranthene	206-44-0	0.000961		0.000200	0.000500	0.000190	mg/L	8/1/2008 13:32	402960	1.00	maz
Fluorene	86-73-7	0.0103		0.000200	0.000500	0.000190	mg/L	8/1/2008 13:32	402960	1.00	maz
Naphthalene	91-20-3	0.00118		0.000400	0.000500	0.000390	mg/L	8/1/2008 13:32	402960	1.00	maz
Phenanthrene	85-01-8	0.000190	D	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:32	402960	1.00	maz
Pyrene	129-00-0	0.000450	<u></u>	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:32	402960	1.00	maz
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		TRRP	Labo	TRRP Laboratory Test Results	lest Re	sults					
Job Number: 357238 CUSTOMER Pastor, Behling & Wheeler, 11C	r, LLC	PROJI	SCT 162	PROJECT 1620 HOUSTON TX-WOOD PRESERVING ATTN	TX- WOOD	PRESERVI	NG AT	Eric Matzne	Date: 8	8/11/2008	8
Customer Sample ID: WG-162	WG-1620-MW10A-071608	1608			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-013			
					Sa	Sample Matrix Water		Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	O FLAG	HDL I	MOL	SDL	SHND	Analysis Date/Time	Batch	DP	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	IIITA
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	ng/L	7/26/2008 16:26	402524	1.00	zĮ
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	J/gm	7/26/2008 16:26	402524	1.00	zų
Chlorobenzene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	Шg/L	7/26/2008 16:26	402524	1.00	zIJ
Bthylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	1/gm	7/26/2008 16:26	402524	1.00	zIJ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/26/2008 16:26	402524	1.00	zų
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/26/2008 16:26	402524	1.00	ΣŲ
Xylenes (total)	1330-20-7	0.00127	n	0.00302	0.0150	0.00127	mg/L	7/26/2008 16:26	402524	1.00	zĮJ
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Tob Niimher: 357738		TRRP	Labo	TRRP Laboratory Test Results	est Re	sults			Date: 8	8/11/2008	×
CUSTOMER Pastor, Behling & Wheeler, LLC		PROII	SCT. 162(	PROJECT. 1620 HOUSTON TX: WOOD PRESERVING ATTN.	TX- WOOD	PRESERVI	NG ATI	Eric Matzne			,
Customer Sample ID: WG-162	WG-1620-MW10A-071608	1608			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-013			
					Sa	Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	Q FLAG	TGW	MQL	SDL	STINU	Analysis Date/Time Batch	e Batch	D.F.	Analyst
Method: SW-846 8270C, Water											
2-Methylnaphthalene	91-57-6	0.000380	n	0.000400	0.000500	0.000380	mg/L	8/1/2008 13:59	402960	1.00	maz
Acenaphthene	83-32-9	0.000290	n	0.000300	0.000500	0.000290	mg/L	8/1/2008 13:59	402960	1.00	maz
Acenaphthylene	208-96-8	0,000290	n	0.000500	0.000500	0.000290	mg/L	8/1/2008 13:59	402960	1.00	maz
Anthracene	120-12-7	0.000190	n	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000200	<del>رسز</del>	0.000200	0.00250	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
Dibenzofuran	132-64-9	0.000290	D	0.000300	0.000500	0.000290	mg/L	8/1/2008 13:59	402960	1.00	maz
Fluoranthene	206-44-0	0.000190	D	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
Fluorene	86-73-7	0.000190	n	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
Naphthalene	91-20-3	0.000380	n	0.000400	0.000500	0.000380	mg/L	8/1/2008 13:59	402960	1.00	maz
Phenanthrene	85-01-8	0.000190	n	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
Pyrene	129-00-0	0.000190	D	0.000200	0.000500	0.000190	mg/L	8/1/2008 13:59	402960	1.00	maz
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Job Number: 357238		TRRP Laboratory Test Results	Lab	orato	ry Te	st Res	ults		D	Date: 8/	8/11/2008	x
CUSTOMER: Pastor, Behling & Wheeler, LLC	r, LLC	PROH	CT. 1	620 HOU	STON T	K- WOOD	PRESERVI	I AT	PROJECT 1620 HOUSTON TX- WOOD PRESERVING ATTN Enc Matzner			
Customer Sample ID: WG-162	WG-1620-MW10B-071608	1608				Lat	oratory Sa	mple ID:	Laboratory Sample ID: 357238-014			
Date/Time Sampled 7/16/2008	08 11:50					Sar	Sample Matrix Water		Water			
Date/Time Received: 7/16/2008	08 16:33											
TEST METHOD	CAS#	RESULT	O FLAG		MDL	MQL	SDL	<b>UNITS</b>	Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water												
Separatory Funnel Liq/Liq Extraction	NA	Complete						NA	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water												
1,2-Dichloroethane	107-06-2	0.000520	D	0.0	0.00109	0.00500	0.000520	mg/L	7/26/2008 16:51	402524	1.00	Ŕ
Benzene	71-43-2	0.000250	n	0.0	0.00112	0.00500	0.000250	mg/L	7/26/2008 16:51	402524	1.00	zŲ
Chlorobenzene	108-90-7	0.000470	D	0.0	0.00150	0.00500	0.000470	mg/L	7/26/2008 16:51	402524	1.00	zţ
Ethylbenzene	100-41-4	0.000250	n	0.0	0.00142	0.00500	0.000250	mg/L	7/26/2008 16:51	402524	1.00	۲Ų
Methylene Chloride	75-09-2	0.000540	D	0.0	0.00122	0.00500	0.000540	mg/L	7/26/2008 16:51	402524	1.00	zŪ
Toluene	108-88-3	0.000410	D	0.0	0.00138	0.00500	0.000410	mg/L	7/26/2008 16:51	402524	1.00	ħ
Xylenes (total)	1330-20-7	0.00127	D	0.0	0.00302	0.0150	0.00127	mg/L	7/26/2008 16:51	402524	1.00	Ţ
												<u> </u>
Form I			Pag	Page 39								

		TRRP Laboratory Test Results	Lab	orato	ry Te	sst Res	ults			ſ	č		
Job Number: 357238			·		•					Date:	8/11	8/11/2008	
CUSTOMER. Pastor, Behing & Wheeler, LLC	r, LLC	PROJE	CT 16	620 HOU	T NOTS	X-WOOD	PROJECT. 1620 HOUSTON TX- WOOD PRESERVING ATTN	IG ATT	N Eric Matzner	er			
Customer Sample ID: WG-162	WG-1620-MW10B-071608	608				Lab	oratory San	nple ID:	Laboratory Sample ID: 357238-014				
Date/Time Sampled 7/16/2008	08 11:50					San	Sample Matrix	Water	Water				
Date/Time Received: 7/16/2008	08 16:33												
TEST METHOD	CAS#	RESULT	Q FLAG		MDL	MOL	SDL	SHNU	Analysis Date/Time	ime Batch	ch D.F		Analyst
Method: SW-846 8270C, Water													
Acenaphthene	83-32-9	0.0975		0.0	0.000300	0.000500	0.00290	mg/L	8/1/2008 16:41	1 402960		10.0	maz
Acenaphthylene	208-96-8	0.00113		0.0	0.000500	0.000500	0.000290	mg/L	8/1/2008 14:26	6 402960		1.00	maz
Anthracene	120-12-7	0.00484		0.0	0.000200	0.000500	0.000200	mg/L	8/1/2008 14:26	6 402960		1.00 I	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000200	<b>د</b> سز	0.0	0.000200	0.00250	0.000200	mg/L	8/1/2008 14:26	6 402960		1.00 I	maz
Dibenzofuran	132-64-9	0.0392		0.0	0.000300	0.000500	0.000590	J/gm	8/1/2008 16:14	4 402960		2.00 I	maz
Di-n-butyl Phthalate	84-74-2	0.000200	D	0.0	0.000200	0.00250	0.000200	∏⁄gm	8/1/2008 14:26	6 402960		1.00 1	maz
Fluoranthene	206-44-0	0.00397		0.0	0.000200	0.000500	0.000200	J/gm	8/1/2008 14:26	6 402960		1.00	maz
Fluorene	86-73-7	0.0457		0.0	0.000200	0,000500	0.00200	J/gm	8/1/2008 16:41	1 402960		10.0	maz
Naphthalene	91-20-3	0.0140		0.0	0.000400	0.000500	0.000390	mg/L	8/1/2008 14:26	6 402960		1.00 I	maz
Phenol	108-95-2	0.000200	D	0.0	0.000200	0.000500	0.000200	J/gm	8/1/2008 14:26	6 402960		1.00 r	maz
Pyrene	129-00-0	0.00174		0.0	0.000200	0.000500	0.000200	J/gm	8/1/2008 14:26	6 402960		1.00	maz
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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	Fest Re	sults		Ä	Date: 8	8/11/2008	8(
CUSTOMER. Pastor, Behling & Wheeler, LLC		PROJ	3CT 16	20 HOUSTON	TX-WOOD	PRESERVI	VG ATI	PROJECT 1620 HOUSTON TX- WOOD PRESERVING ATTN: Enic Matzner			
Customer Sample ID: WG-162	WG-1620-MW11A-071608	1608			La	boratory Sa	mple ID:	Laboratory Sample ID: 357238-015			
Date/Time Sampled 7/16/2008	08 12:20				Sa	Sample Matrix Water		Water			
Date/Time Received 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	QFLAG	G MDL	MQL	SDL	STINU	UNITS Analysis Date/Time	Batch	D.F.	Analyst
Method: SW-846 3510C, Water											
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/26/2008 17:16	402524	1.00	zIJ
Benzene	71-43-2	0.000250	D	0.00112	0.00500	0.000250	mg/L	7/26/2008 17:16	402524	1.00	zIJ
Chlorobenzene	108-90-7	0.000470	n	0.00150	0.00500	0.000470	ng/L	7/26/2008 17:16	402524	1.00	зIJ
Ethylbenzene	100-41-4	0.000250	n	0.00142	0.00500	0.000250	J/gm	7/26/2008 17:16	402524	1.00	zIJ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/26/2008 17:16	402524	1.00	ΣIJ
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/26/2008 17:16	402524	1.00	ZŲ
Xylenes (total)	1330-20-7	0.00127	n	0.00302	0.0150	0.00127	J/gm	7/26/2008 17:16	402524	1.00	zſĮ
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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	Test Re	sults			Date: 8	8/11/2008	80
Customer Sample ID: WG-1620-MW	WREERE 11A WG-1620-MW11A-071608	***	102	10.00 HOUSILON IA. WOMB FRESERVING ALLIN Laboratory Sample ID: 3:	la-wuau La	Laboratory Sample ID:	mu ALIN mple ID: 35	N EIL Malant 357238-015			
Date/Time Sampled         7/16/2008           Date/Time Received         7/16/2008	)8 12:20 )8 16:33		·		Sa	Sample Matrix		Water			
TEST METHOD Method: SW-846 8270C. Water	CAS#	RESULT	0 FLAG	MDE	NOI	SDL	UNITS	Analysis Date/Time	e Batch	DP	Analyst
2-Methylnaphthalene	91-57-6	0.000400	n D	0.000400	0.000500	0.000400	mg/L	8/1/2008 14:53	402960	1.00	maz
Acenaphthene	83-32-9	0.0200		0.000300	0.000500	0.000300	mg/L	8/1/2008 14:53	402960	1.00	maz
Acenaphthylene	208-96-8	0.000300	n	0.000500	0.000500	0.000300	mg/L	8/1/2008 14:53	402960	1.00	maz
Anthracene	120-12-7	0.000540		0.000200	0.000500	0.000200	mg/L	8/1/2008 14:53	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000200	D	0.000200	0.00250	0.000200	mg/L	8/1/2008 14:53	402960	1.00	ZBM
Dibenzofuran	132-64-9	0.000300	n	0.000300	0.000500	0.000300	J/gm	8/1/2008 14:53	402960	1.00	maz
Fluoranthene	206-44-0	0.00387		0.000200	0.000500	0.000200	ng/L	8/1/2008 14:53	402960	1.00	maz
Fluorene	86-73-7	0.000890		0.000200	0.000500	0.000200	mg/L	8/1/2008 14:53	402960	1.00	maz
Naphthalene	91-20-3	0.000400	n	0.000400	0.000500	0.000400	mg/L	8/1/2008 14:53	402960	1.00	maz
Phenanthrene	82-01-8	0.000200	n	0.000200	0.000500	0.000200	mg/L	8/1/2008 14:53	402960	1.00	maz
Pyrene	129-00-0	0.00184		0.000200	0.000500	0.000200	mg/L	8/1/2008 14:53	402960	1.00	maz

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Job Number: 357238		TRRP	Labo	TRRP Laboratory Test Results	Fest Re	sults			Date: 8	8/11/2008	80
CUSTOMER Pastor, Behing & Wheeler, LLC		PROJ	ECT. 162	PROJECT 1620 HOUSTON TX-WOOD PRESERVING ATTIN	I TX- WOOE	) PRESERVI	NG AT	IN Eric Matzner			
Customer Sample ID: WG-162	WG-1620-MW11B-071608	1608			Ľ	Laboratory Sample ID:	umple ID:	357238-016			
Date/Time Sampled 7/16/2008	08 12:47				S	Sample Matrix		: Water			
Date/Time Received: 7/16/2008	08 16:33										
IEST METHOD	CAS#	RESULT	O FLAG	ADL .	IOM	SDL	SHIU	Analysis Date/Tune	el Batch	ЪР	Ånsher
Method: SW-846 3510C, Water								x		1	
Separatory Funnel Liq/Liq Extraction	NA	Complete					N/A	7/23/2008 08:00	402330	1.00	mra
Method: SW-846 8260B, Water											
1,2-Dichloroethane	107-06-2	0.000520	n	0.00109	0.00500	0.000520	mg/L	7/26/2008 18:05	402524	1.00	ъ
Benzene	71-43-2	0.000250	n	0.00112	0.00500	0.000250	mg/L	7/26/2008 18:05	402524	1.00	돼
Chlorobenzene	108-90-7	0.000470	D	0.00150	0.00500	0.000470	mg/L	7/26/2008 18:05	402524	1.00	zIJ
Ethylbenzene	100-41-4	0.000250	D	0.00142	0.00500	0.000250	mg/L	7/26/2008 18:05	402524	1.00	zIJ
Methylene Chloride	75-09-2	0.000540	n	0.00122	0.00500	0.000540	mg/L	7/26/2008 18:05	402524	1.00	zIJ
Toluene	108-88-3	0.000410	n	0.00138	0.00500	0.000410	mg/L	7/26/2008 18:05	402524	1.00	IJz
Xylenes (total)	1330-20-7	0.00127	D	0.00302	0.0150	0.00127	mg/L	7/26/2008 18:05	402524	1.00	zIJ
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Job Number: 357238		TRRP	Lab	oratory	TRRP Laboratory Test Results	sults		Q	Date: 8	8/11/2008	8
CUSTOMER Pastor, Behling & Wheeler, 11C		PROJ	ECT. 1	620 HOUST(	N TX- WOOI	) PRESERVI	NG AT	PROJECT 1620 HOUSTON TX: WOOD PRESERVING ATTN. Brie Matzner			
Customer Sample ID: WG-162	WG-1620-MW11B-071608	1608			Ц	aboratory Sa	mple ID:	Laboratory Sample ID: 357238-016			
Date/Time Sampled 7/16/2008	08 12:47				Ň	Sample Matrix Water	×	Water			
Date/Time Received: 7/16/2008	08 16:33										
TEST METHOD	CAS#	RESULT	0 FLAG	AG MDL	MOL	SDL	SHNU	Analysis Date/Time	Batch	D.F	Analyst
Method: SW-846 8270C, Water											
Acenaphthene	83-32-9	0.120		0.000300	0.000500	0.00310	mg/L	8/1/2008 17:08	402960	10.0	maz
Acenaphthylene	208-96-8	0.00126		0.000500	0.000500	0.000310	mg/L	8/1/2008 15:20	402960	1.00	maz
Anthracene	120-12-7	0.00472		0.000200	0.000500	0.000210	mg/L	8/1/2008 15:20	402960	1.00	maz
bis(2-ethylhexyl)phthalate	117-81-7	0.000210	D	0.000200	0.00250	0.000210	mg/L	8/1/2008 15:20	402960	1.00	maz
Dibenzofuran	132-64-9	0.0649		0.000300	0.000500	0.00310	mg/L	8/1/2008 17:08	402960	10.0	maz
Di-n-butyl Phthalate	84-74-2	0.000210	D	0.000200	0.00250	0.000210	mg/L	8/1/2008 15:20	402960	1.00	maz
Fluoranthene	206-44-0	0.00383		0.000200	0.000500	0.000210	mg/L	8/1/2008 15:20	402960	1.00	maz
Fluorene	86-73-7	0.0578		0.000200	0.000500	0.00210	mg/L	8/1/2008 17:08	402960	10.0	maz
Naphthalene	91-20-3	0.0772		0.000400	0.000500	0.00410	mg/L	8/1/2008 17:08	402960	10.0	maz
Phenol	108-95-2	0.000210	D	0.000200	0.000500	0.000210	mg/L	8/1/2008 15:20	402960	1.00	maz
Pyrene	129-00-0	0.00163		0.000200	0.000500	0.000210	ng/L	8/1/2008 15:20	402960	1.00	maz
			Pag	Page 44							

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Job Number.: 357238	QUALITY	CONTROL	. RESUL		Report Date.: 08/1	1/2008
CUSTOMER: Pastor, Behling & Wheeler, LL	C PROJEC	T: 1620 HOUSTO	IN TX- WOOD PR		ATTN: Eric Matzner	
QC Type Description		Reag. Code	e Lab	D ID	Dilution Factor	Date Time
		11				۰
Test Method: SW-846 8270C Method Description.: Semivolatile Organ	ics, Low Level		: 402622 4		Analys	t: maz
LCS Laboratory Control Sample		SVS061808A	402237			07/28/2008 1157
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	8.00951 7.41943	***********************	10.0 10.0		80.1 74.2	26-168 36-139
LCS Laboratory Control Sample		SVS061808A	402330			07/28/2008 1251
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	8.70257 8.26954		10.0 10.0		87.0 82.7	26-168 36-139
MB Method Blank		SVS042808A	402237			07/28/2008 1131
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	0 0					
MB Method Blank		SVS042808A	402330			07/28/2008 1224
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	0 0					
MS Matrix Spike		SVS061808A	357241-	6		07/28/2008 1606
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	6.29234 5.76467		10.0 10.0	0		60-140 30-130
MS Matrix Spike		SVS061808A	357238-	8		07/28/2008 1727
Parameter/Test Description	QC Result	QC Result	True Value	Orig. V	alue Calc. Resul	t * Limits F
2-Methylnaphthalene, Water Naphthalene, Water	7.46234 6.87366		10.0 10.0	0		60-140 30-130

	Job Number.: 357238	QUALITY	CONTROI	. RESUL		Report Date.: 08/	11/2008	
CUSTOMER: P	astor, Behling & Wheeler,	LLC PROJE	CT: 1620 HOUST	IN TX- WOOD PR	,	ITTN:		
QC Type	Descripti	on	Reag. Code	e Lat	D	Dilution Factor	Date T	ime
MSD	Matrix Spike Duplicate		SV5061808A	357241-	6		07/28/2008	163:
Para	meter/Test Description	QC Result	QC Result	True Value	Orig. Va	lue Calc.Resu	lt * Limits	
2-Methylnapht	halene, Water	5.77560	6.29234	10.0	0	58	60-140	
Naphthalene,	Water	5.33391	5.76467	10.0	0	8.6 53 7.8	30.0 30-130 50.0	

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
2-Methýlnaphthalene, Water	6.39688	7.46234	10.0	0	64 15.4	60-140	
Naphthalene, Water	5.96048	6.87366	10.0	0	60 14.2	30-130 50.0	

LCS Laboratory Control Sample	9	SVS061808A	402237		07	/31/2008 1304
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Acenaphthene, Water	7.96878		10.0		79.7	32-165
Acenaphthylene, Water	7.88855		10.0		78.9	10-150
Anthracene, Water	8.01314		10.0		80.1	23-178
bis(2-ethylhexyl)phthalate, Water	9.81647		10.0		98.2	25-173
Dibenzofuran, Water	8.71395		10.0		87.1	35-153
Di-n-butyl Phthalate, Water	9.72681		10.0		97.3	28-185
Fluoranthene, Water	9.68208		10.0		96.8	28-180
Fluorene, Water	8.50862		10.0		85.1	30-189
2-Methylnaphthalene, Water	8.36087		10.0		83.6	26-168
Naphthalene, Water	7.46269		10.0		74.6	36-139
Phenanthrene, Water	8.94940		10.0		89.5	26-166
Pyrene, Water	9.38808		10.0		93.9	28-173
Phenol, Water	3.29061		10.0		32.9	20-83

Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result *	Limits	F
cenaphthene, Water	8.65122		10.0		86.5	32-165	
cenaphthylene, Water	8.22403		10.0		82.2	10-150	
nthracene, Water	8.20740		10.0		82.1	23-178	
is(2-ethylhexyl)phthalate, Water	9.63234		10.0		96.3	25-173	
ibenzofuran, Water	8.98945		10.0		89.9	35-153	
i-n-butyl Phthalate, Water	9.52590		10.0		95.3	28-185	
luoranthene, Water	9.77101		10.0		97.7	28-180	
luorene, Water	9.03668		10.0		90.4	30-189	
-Methylnaphthalene, Water	8.58536		10.0		85.9	26-168	
aphthalene, Water	7.96491		10.0		79.6	36-139	
henanthrene, Water	9.02957		10.0		90.3	26-166	
yrene, Water	9.40764		10.0		94.1	28-173	
henol, Water	4.28959		10.0		42.9	20-83	

Job Number.: 357238

Report Date.: 08/11/2008

QC Type	Description	<b>1</b>	Reag. Code	•	Lab	ID	Dilu	tion Fa	ctor	Da	ite	Time
MB	Method Blank		SVS042808A		402237					07/3	1/2008	1237
Para	ameter/Test Description	QC Result	QC Result	True	Value	Orig.	Value	Calc.	Result	*	Limits	F
Acenaphthene,		0										
Acenaphthyler Anthracene, W	•	0										
	exyl)phthalate, Water	0										
ibenzofuran,		Ő										
	nthalate, Water	0.85928										b
luoranthene,		0										
luorene, Wat	ter thalene, Water	0										
laphthalene,		0.61796										ь
henanthrene,		0										ņ
Pyrene, Water	•	0										
Phenol, Water	•	0										

MB Method Blank		SVS042808A	402330				0	7/3	1/2008 1	741
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	0.86527									b
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		SVS061808A	357241-	6	0	7/31/2008 1	646
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Acenaphthene, Water	7.40191		10.0	0	74	46-118	
Acenaphthylene, Water	6.13570		10.0	0	61	30-130	
Anthracene, Water	5.71718		10.0	0.51137	52	30-130	
bis(2-ethylhexyl)phthalate, Water	5.77295		10.0	0.19624	56	60-140	а
Dibenzofuran, Water	8.02483		10.0	0	80	30-130	
Di-n-butyl Phthalate, Water	7.20269		10.0	0.86539	63	30-130	
Fluoranthene, Water	7.81132		10.0	0	78	30-130	
Fluorene, Water	7.61204		10.0	0	76	30-130	
2-Methylnaphthalene, Water	6.72468		10.0	0	67	60-140	
Naphthalene, Water	5.32979		10.0	0.65926	47	30-130	
Phenanthrene, Water	7.20420		10.0	0.36735	68	30-130	
Pyrene, Water	7.53654		10.0	0	75	26-115	
Phenol, Water	2.32053		10.0	0	23	10-112	

Job Number.: 357238

Report Date.: 08/11/2008

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
CUSTOMER: Pa	astor, Behling & Wheeler, LLC PROJEC	T: 1620 HOUSTON TX	- WOOD PR	ATTN:		

MS Matrix Spike		SVS061808A	357238-	8	0	7/31/6	2008 1	932
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* L'	imits	F
Acenaphthene, Water	7.85618		10,0	0	79		46-118	-
Acenaphthylene, Water	7.43285		10.0	0	74		30-130	
Anthracene, Water	7.26475		10.0	0.55708	67	3	30-130	
bis(2-ethylhexyl)phthalate, Water	6.29982		10.0	0.34463	60	(	50-140	
Dibenzofuran, Water	8.31435		10.0	0	83	3	30-130	
Di-n-butyl Phthalate, Water	8.05436		10.0	0.86234	72	1	30-130	
Fluoranthene, Water	8.82617		10.0	0	88	1	30-130	
Fluorene, Water	7,99349		10.0	0	80		30-130	
2-Methylnaphthalene, Water	7.66624		10.0	0	77	(	50-140	
Naphthalene, Water	6.55216		10.0	0.63239	59		30-130	
Phenanthrene, Water	8,16833		10.0	0.36618	78		30-130	
Pyrene, Water	9.99803		10.0	2.12861	79		26-115	
Phenol, Water	3.09383		10.0	0	31		10-112	

MSD Matrix Spike Duplicate		SVS061808A	357241-	6		7/31/2008 1	713
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Acenaphthene, Water	6.71948	7.40191	10.0	0	67 9.7	46-118	
Acenaphthylene, Water	5.83754	6.13570	10.0	0	58 5.0	30-130 50.0	
Anthracene, Water	5.95625	5.71718	10.0	0.51137		30-130 50.0	
bis(2-ethylhexyl)phthalate, Water	6.02487	5.77295	10.0	0.19624	4.1 58 4.3	60-140 30.0	а
Dibenzofuran, Water	7.32599	8.02483	10.0	0	73	30-130	
Di-n-butyl Phthalate, Water	7.36497	7,20269	10.0	0.86539	9.1 65 2.2	50.0 30-130 50.0	
Fluoranthene, Water	8.07137	7.81132	10.0	0	81	30-130	
Fluorene, Water	7.18727	7.61204	10.0	0	3.3 72 5.7	50.0 30-130 50.0	
2-Methylnaphthalene, Water	6.17452	6.72468	10.0	0	62	60-140	
Naphthalene, Water	4.95301	5.32979	10.0	0.65926	8.5 43 7.3	30.0 30-130 50.0	
Phenanthrene, Water	7.21738	7.20420	10.0	0.36735		30-130 50.0	
Pyrene, Water	7.81167	7.53654	10.0	0	78 3.6	26-115 31.0	
Phenol, Water	2.12458	2.32053	10.0	0	21 8.8	10-112 23.0	

Report Date .: 08/11/2008

MSD Matrix Spike Duplicate		SVS061808A	357238-	9	C	7/31/2008 2000
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Acenaphthene, Water	6.70679	7.85618	10.0	0	67 ·	46-118
Acenaphthylene, Water	6.08882	7.43285	10.0	0	15.8 61	31.0 30-130
Anthracene, Water	7.33015	7.26475	10.0	0.55708	19.9 68 0.9	50.0 30-130 50.0
bis(2-ethylhexyl)phthalate, Water	6.57675	6.29982	10.0	0.34463	62	60-140
Dibenzofuran, Water	7.34702	8.31435	10.0	0	4.3 73	30.0 30-130
Di-n-butyl Phthalate, Water	8.55077	8.05436	10.0	0.86234	12.4 77	50.0 30-130
Fluoranthene, Water	9.08965	8.82617	10.0	0	6.0 91	50.0 <u>30-</u> 130
Fluorene, Water	7.36927	7.99349	10.0	0	2.9 74	50.0 30-130
2-Methylnaphthalene, Water	6.77132	7.66624	10.0	0	8.1 68	50.0 60-140
Naphthalene, Water	5.73181	6.55216	10.0	0.63239	12.4 51	30.0 30-130
Phenanthrene, Water	8.01782	8.16833	10.0	0.36618	13.4 77	50.0 30-130
Pyrene, Water	10.0792	9.99803	10.0	2.12861	1.9 80	50.0 26-115
Phenol, Water	2.88611	3.09383	10.0	0	0.8 29 6.9	31.0 10-112 23.0

Test Method.....: SW-846 8260B Method Description.: Volatile Organics

Job Number.: 357238

Units..... ug/L Batch(s)...: 402524 402545 402679 402765 Analyst...: zfl

LCS Laboratory Control Sample	9	VS072108H	402524 -	1	0	7/26/2008 114	45
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	49.8367		50.00	ND	99.7	68-127	
Chlorobenzene, Water	50.8440		50.00	ND	101.7	65-129	
1,2-Dichloroethane, Water	46.0968		50.00	ND	92.2	65-133	
Ethylbenzene, Water	48.4969		50.00	ND	97.0	64-132	
Methylene Chloride, Water	44.7073		50.00	ND	89.4	54-133	
Toluene, Water	48.8752		50.00	ND	97.8	63-127	
Xylenes (total), Water	145.773		150.	ND	97.2	37-161	

MB Method Blank		VS072308C	402524-	1	0	7/26/2008	1300
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water	ND		-		······································		
Chlorobenzene, Water	ND						
1,2-Dichloroethane, Water	ND						
Ethylbenzene, Water	ND						
Methylene Chloride, Water	ND						

	Job Number.: 357238	QUALITY	CONTROL	. R	ESULI	TS	Report	Date.: 08/	1/20	08	
CUSTOMER: Pa	stor, Behling & Wheeler, LLC	PROJEC	T: 1620 HOUSTO	IN TX-	WOOD PR		ATTN:				
QC Type	Description		Reag. Code	•	Lab	ID	Dilut	ion Factor	D	ate 1	Time
мв	Method Blank		VS072308C		402524-1	1			07/	26/2008	1300
Param	eter/Test Description	QC Result	QC Result	True	e Value	Orig. V	/alue	Calc. Resul	t *	Limits	F
Toluene, Water Kylenes (total		ND ND									
MS	Matrix Spike		VS072108E		357205-1	5	10.00	000	07/	26/2008	1357
Param	eter/Test Description	QC Result	QC Result	True	e Value	Orig. V	/alue	Calc. Resul	t *	Limits	F
Benzene, Water Chlorobenzene, 1,2-Dichloroet Thylbenzene, Methylene Chlo Toluene, Water (ylenes (total	Water hane, Water Water ride, Water	55.6429 53.5690 53.6427 72.6651 46.5532 52.7610 185.919			50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.0	NE NC 22 NC NC	) 2.6408 )	105 107 107 100 93 106 102		65-125 74-122 60-140 60-140 60-140 76-125 37-140	2
MSD	Matrix Spike Duplicate		VS072108E		357205-5	j	10.00	000	07/	26/2008	1421
Param	eter/Test Description	QC Result	QC Result	True	e Value	Orig. V	/alue	Calc. Resul	t *	Limits	F
lenzene, Water		58.2751	55.6429		50.00	3	.26342	110 4.6		65-125 30.0	5
hlorobenzene,	Water	54.5350	53.5690		50.00	ND	ŧ	109 1.8		74-122	2
,2-Dichloroet	hane, Water	53.7550	53.6427		50.00	NC	ŧ	108		60-140	)
thylbenzene,	Water	73.6448	72.6651		50.00	22	.6408	0.2		30.0 60-140	)
lethylene Chlo	ride, Water	49.3327	46.5532		50.00	ND	ı.	1.3 99		30.0 60-140	)
oluene, Water		53.6058	52.7610		50.00	ND	1	5.8 107		30.0 76-125	5
(ylenes (total	), Water	190.242	185.919	1	50.0	33	.4804	1.6 105 2.3		30.0 37-140 30.0	)
LCS	Laboratory Control Sample		VS072308H		402545-1				07/:	26/2008	1633
Param	eter/Test Description	QC Result	QC Result	True	Value	Orig. V	alue	Calc. Resul	t *	Limits	F
Senzene, Water Chlorobenzene, L-Dichloroet Chylbenzene, M Methylene Chlor Coluene, Water Cylenes (total	Water hane, Water Water rīde, Water	47.7079 52.6033 40.0843 51.3773 40.5611 51.0267 154.038			50.00 50.00 50.00 50.00 50.00 50.00 50.00 50.00	ND ND ND ND ND ND		95.4 105.2 80.2 102.8 81.1 102.1 102.7		68-127 65-129 65-133 64-132 54-133 63-127 37-161	> 5 5 5 7

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Job Number.: 357238

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### QUALITY CONTROL RESULTS

Report Date.: 08/11/2008

CUSTOMER: Pastor	, Behling & Wheeler, L	LC PROJ	ECT: 1620 HOUSTO	ON TX-	WOOD PR		ATTN:					
QC Type	Description		Reag. Code	,	Lab	ID	Dilu	tion Fa	ctor	D٤	ate	Time
MB Meth	nod Blank		VS072308C		402545-1					07/2	26/2008	1809
Parameter,	/Test Description	QC Result	QC Result	True	Value	Orig.	Value	Calc.	Resul	t *	Limit	s F
enzene, Water hlorobenzene, Wate ,2-Dichloroethane, thylbenzene, Water ethylene Chloride, oluene, Water ylenes (total), Wa	, Water , Water	ND ND ND ND ND ND ND	-					****				

MS Matrix Spike		VS072308E	357238-	8	C	7/26/2008 18	833
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water Chlorobenzene, Water 1,2-Dichloroethane, Water Ethylbenzene, Water Methylene Chloride, Water Toluene, Water	50.9074 56.3836 38.5972 56.9375 41.1867 55.5808		50.00 50.00 50.00 50.00 50.00 50.00 50.00	ND ND ND ND ND ND	102 113 77 114 82 111	65-125 74-122 60-140 60-140 60-140 76-125	
Xylenes (total), Water	167.158		150.0	ND	111	37-140	

MSD Matrix Spike Duplicate		VS072308E	357238-	9	0	7/26/2008 1857
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Benzene, Water	51.1985	50.9074	50.00	ND	102	65-125
Chlorobenzene, Water	57.1879	56.3836	50.00	ND	0.6 114	30.0 74-122
1,2-Dichloroethane, Water	32.0120	38,5972	50.00	ND	1.4 64	30.0 60-140
Ethylbenzene, Water	60.9454	56.9375	50.00	ND	18.7 122	30.0 60-140
Methylene Chloride, Water	35.9621	41.1867	50.00	ND	6.8 72	30.0 60-140
Toluene, Water	59.5166	55.5808	50.00	ND	13.5 119	30.0 76-125
Xylenes (total), Water	176.389	167.158	150.0	ND	6.8 118 5.4	30.0 37-140 30.0

LCS Laboratory Control Sample		VS072808H	402679-	1	0	7/29/2008 17	05
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, Water Chlorobenzene, Water 1,2-Dichloroethane, Water Ethylbenzene, Water Methylene Chloride, Water Toluene, Water Xylenes (total), Water	47.9237 50.5378 47.5313 48.9990 44.9055 49.0157 150.438		50.00 50.00 50.00 50.00 50.00 50.00 150.	ND ND ND ND ND ND	95.8 101.1 95.1 98.0 89.8 98.0	68-127 65-129 65-133 64-132 54-133 63-127	

Job Number.: 357238

Report Date.: 08/11/2008

CUSTOMER: Pastor, Behling & Wheeler, L	LC PROJ	ECT: 1620 HOUSTO	N TX- W	DOD PR		ATTN:					
QC Type Description	1	Reag. Code		Lab	ID	Dilut	ion Fa	ctor	Da	te	Тіле
MB Method Blank		V\$072308C	4(	)2679-1					07/2	9/2008	1859
Parameter/Test Description	QC Result	QC Result	True Va	alue	Orig.	Value	Calc.	Resul	t *	Limit	s l
enzene, Water hlorobenzene, Water ,2-Dichloroethane, Water thylbenzene, Water ethylene Chloride, Water oluene, Water ylenes (total), Water	ND ND ND ND ND ND					*****					

MS Matrix Spike		VS072308E	357622-	6 20.0	0000 0	7/29/2008 1	946
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits	F
Benzene, TCLP Chlorobenzene, TCLP 1,2-Dichloroethane, TCLP	47.0298 51.1840 41.8308	<u>a muni a sa kang pang kang kang kang kang kang kang kang k</u>	50.00 50.00 50.00	ND ND ND	94 102 84	63-123 61-126 66-135	

MSD Matrix Spike Duplicate		VS072308E	357622-	6 20.00	0000 0	7/29/2008 2010
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
Benzene, TCLP	49.3851	47.0298	50.00	ND	99	63-123
Chlorobenzene, TCLP	53.7705	51.1840	50.00	ND	4.9 108	30.0 61-126
1,2-Dichloroethane, TCLP	41.8055	41.8308	50.00	ND	4.9 84 0.1	30.0 66-135 30.0

P8 Prep. Blank		VS072308C		20.0	0000	07/29/2008	1835
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Resul	t * Limits	F
Benzene, TCLP	ND		-				
Chlorobenzene, TCLP	ND						
1,2-Dichloroethane, TCLP	ND						
Ethylbenzene, TCLP	ND						
Methylene Chloride, TCLP	ND						
Toluene, TCLP	ND						
Xylenes (total), TCLP	ND						

LCS Laboratory Control Sample	2	VS072108H	402765-	1	0	7/3	0/2008 1	324
Parameter/Test Description	QC Result	QC Result	True Value	Orig. Value	Calc. Result	*	Limits	F
Benzene, Water	54.7541		50.00	ND	109.5		68-127	
Chlorobenzene, Water	53.6703		50.00	ND	107.3		65-129	
1,2-Dichloroethane, Water	56.5442		50.00	ND	113.1		65-133	
Ethylbenzene, Water	51.6319		50.00	ND	103.3		64-132	
Methylene Chloride, Water	40.2467		50.00	ND	80.5		54-133	
Toluene, Water	51,1232		50.00	ND	102.2		63-127	
Xylenes (total), Water	154.323		150.	ND	102.9		37-161	

Page 52 \* %=% REC, R=RPD, A=ABS Diff., D=% Diff.

er, LLC PROJ ption QC Result ND ND ND ND ND ND ND ND ND ND ND ND	ECT: 1620 Hous Reag. Co VS072308C QC Result VS072108E QC Result	402765- True Value	D ID Dil 1 Orig. Value	ution Factor	Date Time 07/30/2008 144 * Limits 07/30/2008 180/
QC Result ND ND ND ND ND ND ND ND ND	VS072308c QC Result	402765- True Value	1 Orig. Value	Calc. Result	07/30/2008 144 * Limits
ND ND ND ND ND ND ND	QC Result	True Value	Orig. Value	Calc. Result	* Limits
ND ND ND ND ND ND ND	VS072108E	357678-		Calc. Result	* Limits
ND ND ND ND ND			4 20.0		
QC Result			4 20.0	00000	07/30/2008 180
QC Result	OC Result				
	do Result	True Value	Orig. Value	Calc. Result	* Limits
49.3456 47.6160 58.5162	44999999999999999999999999999999999999	50.00 50.00 50.00	ND ND ND	99 95 117	63-123 61-126 66-135
e	VS072108E	357678-	4 20.0	0000 1	07/30/2008 1830
QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
52.5434	49.3456	50.00	ND	105	63-123
49.9001	47.6160	50.00	ND	6.3 100	30.0 61-126
53.6023	58.5162	50.00	ND	4.7 107 8.8	30.0 66-135 30.0
	VS072308C				07/30/2008 1418
QC Result	QC Result	True Value	Orig. Value	Calc. Result	* Limits F
ND ND ND ND ND ND					· ••• ••••••••••••••••••••••••••••••••
	49.3456 47.6160 58.5162 e QC Result 52.5434 49.9001 53.6023 QC Result ND ND ND ND ND ND ND ND	49.3456           47.6160           58.5162           e           QC Result           QC Result           S2.5434           49.3456           49.9001           47.6160           53.6023           58.5162           VS072308c           QC Result           QC Result           QC Result           QC Result           QC Result           ND           ND	49.3456         50.00           47.6160         50.00           58.5162         50.00           e         VS072108E         357678-           QC Result         QC Result         True Value           52.5434         49.3456         50.00           49.9001         47.6160         50.00           53.6023         58.5162         50.00           VS072308c         QC Result         True Value           ND         ND         ND           ND         ND         ND	49.3456         50.00         ND           47.6160         50.00         ND           58.5162         50.00         ND           QC Result         QC Result         True Value         Orig. Value           52.5434         49.3456         50.00         ND           49.9001         47.6160         50.00         ND           53.6023         58.5162         50.00         ND           VS072308C         QC Result         VS072308C         QC Result         QC rig. Value           ND         ND         ND         ND         ND         ND           ND         ND         ND         ND         ND         ND           MD         ND         ND         ND         ND         ND           ND         ND         ND         ND         ND         ND           ND         ND         ND         ND         ND         ND         ND           ND         ND         ND         ND         ND         ND         ND         ND         ND         ND	49.3456         50.00         ND         99           47.6160         50.00         ND         95           58.5162         50.00         ND         95           acc Result         QC Result         CC Result         True Value         Orig. Value         Calc. Result           acc Result         QC Result         QC Result         True Value         Orig. Value         Calc. Result           52.5434         49.3456         50.00         ND         105         6.3           49.9001         47.6160         50.00         ND         100         4.7           53.6023         58.5162         50.00         ND         100         4.7           S0         VS072308c         4.7         8.8         00         00         00           ND         ND         107         8.8         00         00         00         00           ND         ND         ND         107         8.8         00         00         00           ND         ND         ND         ND         00         00         00         00         00         00

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#### SURROGATE RECOVERIES REPORT

Report Date.: 08/11/2008

ATTN: Eric Matzner

#### Job Number.: 357238

# CUSTOMER: Pastor, Behling & Wheeler, LLC PROJECT: 1620 HOUSTON TX- WOOD PR

				: Volatile Organics : 402524 402545 402679 40276		hod Code. t Matrix.		r	Prep Batch: Equipment Code: GCMSVOA05
Lab ID			DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
357205-		MS		WG-1620-MW17C-071508	07/26/200		107.6	88.4	103.4
357205-		MSD		WG-1620-MW17C-071508	07/26/200		110.1	90.6	104.1
357238-	1			WG-1620-FB01-071608	07/27/200		127.7	87.7	124.3
357238-	2			WG-1620-MW07-071608	07/30/200		105.1	86.2	105.2
357238-	3			WG-1620-P10-071608	07/30/200		115.4	110.2	113.9
357238-	4			WG-1620-MW01A-071608	07/30/200		99.3	78.9	100.4
357238-	5			WG-1620-FD01-071608	07/30/200		106.1	86.5	110.8
357238-	6			WG-1620-MW08-071608	07/29/200	8 78.6	103.8	84.8	100.9
357238-	7			WG-1620-P12-071608	07/29/200	3 70.6	100.8	76.1	99.6
357238-		MS		WG-1620-P12-071608 MS	07/26/200		124.9	97.0	119.6
357238-		MSD		WG-1620-P12-071608 MSD	07/26/200	B 64.5A	132.3A	85.8	128.8
	10			WG-1620-FD02-071608	07/26/200	8 96.5	103.6	93.4	101.4
	11			WG-1620-TB04-071608	07/26/200	3 95.8	106.1	81.4	101.8
	12			WG-1620-MW02-071608	07/26/200	8 97.1	101.7	85.7	98.4
	13			WG-1620-MW10A-071608	07/26/200	8 101.6	111.3	88.9	110.7
357238-				WG-1620-MW10B-071608	07/26/200	3 97.2	104.4	85.6	98.7
	15	÷		WG-1620-MW11A-071608	07/26/200	8 95.9	108.5	86.9	102.1
	16	÷		WG-1620-MW11B-071608	07/26/200	3 98.0	101.9	82.5	102.0
+02524-	1	LCS			07/26/200	3 101.2	87.7	92.0	88.5
02524-	1	MB			07/26/200	3 94.7	98.8	88.2	95.1
02545-	1	LCS			07/26/200	3 73.6	102.9	81.3	96.1
402545-	1	MB			07/26/200	3 78.9	104.8	84.7	101.9
402679-	1	LCS			07/29/200		104.1	102.8	103.2
402679-	1	MB			07/29/200	3 91.1	95.3	87.8	86.7
402765-	1	LCS			07/30/200	3 107.2	89.3	87.2	95.9
02765-	1	MB			07/30/200	3 110.0	105.4	87.7	101.6
Test		Test	Des	cription	Limits				
12DCED	*	1 2-	Dich	loroethane-d4	70 - 170				
BRFLBE				Luorobenzene	70 - 130				
DBRFLM				luoromethane	70 - 130				
TOLD8					70 - 130				
1000		Tolu	ene-	uo	70 - 130				

			: Volatile Organics : 402679 402765			d Code Matrix			Prep Bato Equipment	h: Code: GCMSVOA07
Lab ID	D	T	Sample ID		Date	12DCED	BRFLBE	DBRFLM	TOLD8	·····
357622- 357678-			VB-25233 VB-25233 POST-DILUTION POST-DILUTION	07 07 07 07	/29/2008 /29/2008 /30/2008 /30/2008 /29/2008 /30/2008	84.5 80.0 103.2 103.9 100.2 109.4	104.5 109.2 100.4 102.6 102.8 111.9	88.2 86.6 80.5 90.0 96.6 86.9	96.2 102.2 101.7 99.8 94.5 103.3	
Test	Test D	esc	cription	Limits						
12DCED BRFLBE DBRFLM TOLD8	4-Brom	iof   iof	oroethane-d4 uorobenzene uoromethane 18	70 - 130 70 - 130 70 - 130 70 - 130 70 - 130						

### SURROGATE RECOVERIES REPORT

Report Date.: 08/11/2008

Job Number.: 357238

CUSTOMER: 483648

#### PROJECT: 1620 HOUSTON TX- WOOD PR

TN: Eric Matzner
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Met Bat	:hod :ch(s)	: Semivolatile Organics, : 402622 402960		od Code Matrix				ntch: ent Code:	402237 EGCMS08
Lab ID	DT	Sample ID	Date	246TBP	2FLUBP	2FLUPH	N1TRD5	PHEND6	TERD14
57238- 1		WG-1620-FB01-071608	07/31/2008	62.7	95.7	26.5	94.1	20.3	118.3
57238- 2		WG-1620-MW07-071608	07/31/2008	102.4	96.3	36.2	87.9	25.8	119.1
57238- 3		WG-1620-P10-071608	07/31/2008	107.9	89.2	37.8	79.2	25.4	121.5
57238- 4		WG-1620-MW01A-071608	07/31/2008	111.3	99.7	47.1	94.4	34.2	124.1
57238- 4		WG-1620-MW01A-071608	08/01/2008	92.9	87.3	37.3	82.9	19.6	113.3
57238- 4		WG-1620-MW01A-071608	08/01/2008	75.7	83.6	37.0	67.2	20.0	103.8
57238- 5		WG-1620-FD01-071608	07/31/2008	115.6	101.6	46.9	91.5	32.7	123.3
57238- 5		WG-1620-FD01-071608	08/01/2008	94.8	86.4	44.1	80.9	20.7	112.6
57238- 10		WG-1620-FD02-071608	07/31/2008	88.2	75.0	28.7	68.8	21.3	110.2
	MS	MW-12W	07/28/2008	95.2	64.8	34.9	189.7A	27.3	74.2
	MS	MW-12W	07/31/2008	88.7	79.4	31.2	68.1	25.2	105.7
	MSD	MW-12W	07/28/2008	83.2	53.5	24.6	54.1	24.8	71.1
	MSD	MW-12W	07/31/2008	78.7	68.4	26.2	59.1	19.3	99.8
0223721			07/31/2008	104.3	95.8	46.0	88.3	34.4	124.8
0223721			07/31/2008	88.2	91.1	47.1	87.1	34.6	125.0
0223721			07/28/2008	100.1	80.8	34.7	83.9	36.4	86.9
0223721	MB		07/28/2008	52.4	74.0	37.3	74.6	23.0	89.3
Test	Test De	escription	Limits						
46TBP	2,4,6-1	ribromophenol	10 - 123						
FLUBP		obiphenyl	43 - 116						
FLUPH		ophenol	21 - 100						
ITRD5		nzene-d5	35 - 114						
HEND6	Phenol -	-1-	10 - 94						
ERD14	Terphen	iyl-d14	33 - 141						

		: Semivolatile Organics, Low Level : 402622 402960			.: 8270L .: Water			nt Code:	402330 EGCMS08
Lab ID	DT	Sample ID	Date	246TBP	2FLUBP	2FLUPH	NITRD5	PHEND6	TERD14
57238- 6		WG-1620-MW08-071608	07/31/2008	95.0	86.8	38.6	80.0	28.1	116.3
57238- 7 🔪		WG-1620-P12-071608	07/31/2008	101.2	81.9	43.5	76.8	35.1	125.3
57238- 8 MS		WG-1620-P12-071608 MS	07/28/2008	103.7	73.4	41.2	79.4	35.4	82.7
57238- 8 MS		WG-1620-P12-071608 MS	07/31/2008	101.3	86.5	42.9	83.0	32.8	119.2
57238- 9 MSD		WG-1620-P12-071608 MSD	07/28/2008	102.9	59.6	43.4	71.5	33.3	85.8
57238- 9 MSD		WG-1620-P12-071608 MSD	07/31/2008	101.9	71.9	40.8	75.9	31.4	123.5
57238- 12		WG-1620-MW02-071608	08/01/2008	102.2	75.5	42.5	75.1	29.6	113.3
57238- 13		WG-1620-MW10A-071608	08/01/2008	85.8	74.4	37.8	79.5	19.3	117.4
57238- 14		WG-1620-MW108-071608	08/01/2008	110.6	86.2	53.3	85.7	38.9	112.0
57238- 14		WG-1620-MW10B-071608	08/01/2008	100.9	81.5	47.0	80.8	34.9	108.1
57238- 14		WG-1620-MW10B-071608	08/01/2008	91.2	81.5	36.3	71.9	20.9	109.3
57238- 15		WG-1620-MW11A-071608	08/01/2008	91.2	79.2	41.2	77.0	29.1	108.6
57238- 16		WG-1620-MW11B-071608	08/01/2008	109.4	86.3	51.4	85.4	36.7	120.0
57238- 16		WG-1620-MW11B-071608	08/01/2008	78.5	83.9	39.8	68.7	15.5	111.3
0233021 LCS			07/28/2008	104.8	85.3	68.3	96.5	48.0	93.9
0233021 LCS			07/31/2008	107.7	103.1	61.5	98.8	46.8	139.3
0233021 MB			07/28/2008	56.7	82.0	42.7	85.3	24.9	93.4
0233021 MB			07/31/2008	87.1	94.3	50.8	92.3	39.5	134.8

#### SURROGATE RECOVERIES REPORT

Job Number.: 357238

#### Report Date.: 08/11/2008

#### CUSTOMER: 483648

PROJECT: 1620 HOUSTON TX- WOOD PR ATTN: E

ATTN: Eric Matzner

	ethod: Semivolatile Organi atch(s): 402622 402960	cs, Low Level	Method Code: 8270LL Test Matrix: Water	Prep Batch: 402330 Equipment Code: EGCMS08
Test	Test Description	Lîmits		
246TBP	2,4,6-Tribromophenol	10 - 123		
2FLUBP 2FLUPH	2-Fluorobiphenyl 2-Fluorophenol	43 - 116 21 - 100		
NITRD5	Nitrobenzene-d5	35 - 114		
PHEND6	Phenol-d6	10 - 94		
TERD14	Terphenyl-d14	33 - 141		

### QUALITY ASSURANCE METHODS

### REFERENCES AND NOTES Report Date: 08/11/2008

#### 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.
- Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
   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 reported as the final result. - m-Cresol (3-Methylphenol) and p-Cresol (4-methylphenol) co-elute. The result of the two is reported as either m&p-cresol or as 4-methylphenol (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.
- Results for LCS and MS/MSD recoveries listed in the report are reported as ug/L on-column values which are not corrected for variables such as sample volumes or weights extracted, final volume of extracts and dilutions. To correct QC on-column recoveries to reflect actual spiking volumes for soils, multiply the values reported for Diesel Range Organics and Semivolatiles by 33.3 and Gasoline Range Organics by 20. The 8260 and 1006 results will not require correction. The only corection required for water analysis is for method 1006 where the reported concentraiton must be multiplied by 0.1.
- Due to limitiation of the reporting software, results for the Method blank in the Semivolatile fraction are reported as "0". Which indicates there was no compound detected at the reporting limit for the compound reveiwed.
- The dilution factor listed on the report represents only the analytical dilutions necessary for the target compounds to be within the calibration range of the instrument. It does not include any preparation factors, dry weight or any other adjustment.

#### 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

#### QUALITY ASSURANCE METHODS

#### REFERENCES AND NOTES

Report Date: 08/11/2008

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.
- 0 Sample required dilution due to matrix interference.
- D Sample reported from a dilution.
- d Spike and/or surrogate diluted.
- E The reported concentration exceeds the instrument calibration.
- F The analyte is outside QC limits and was not detected in any associated samples in the analytical batch.
- H Continuing Calibration Verification (CCV) standard is not associated with the samples reported.
- 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.
- I 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

### QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 08/11/2008

DLFac	- Detection Limit Factor
DU	- Duplicate
EB	- Extraction Blank (TCLP, SPLP, etc.)
ICAL	- Initial Calibration
ICB	
	- Initial Calibration Blank
ICV	<ul> <li>Initial Calibration Verification</li> </ul>
ISA	- Interference Check Sample A - ICP
I SB	- Interference Check Sample B - ICP
LCD	- Laboratory Control Duplicate
LCS	- Laboratory Control Sample
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	<ul> <li>Sample Quantitation Limit (TRRP)</li> </ul>

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.

Jop	LABORA Number: 357238	TORY CH	RONI	CLE	Date:	08/11/2008		
CUSTOMER: Pastor,	Behling & Wheeler, LLC	ROJECT: 1620 +	iouston t	X- W00		ATTN: Eric Mat	zner	
Lab ID: 357238-1 METHOD	Client ID: WG-1620-FB01-071608 DESCRIPTION	RUN#		16/2008 PREP BT		Date: 07/16/2 DATE/TIME A		DILUTIO
SW-846 3510C	Electronic Data Deliverables Extraction (Sep. Funnel) SVOC Low Leve	≥l 1	402237			07 (33 (3000	A / / F	
SW-846 8270C	Semivolatile Organics, Low Level	≠t i 1		402237		07/22/2008 07/31/2008	1445 1332	1.00000
SW-846 8260B	Volatile Organics	1	402545	402231		07/27/2008	0248	1.00000
ab ID: 357238-2	Client ID: WG-1620-MW07-071608	Date Re	cvd: 07/	16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT	#(S)	DATE/TIME A		DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402237			07/22/2008	1445	
SW-846 8270C	Semivolatile Organics, Low Level	1		402237		07/31/2008	1359	1.00000
SW-846 8260B	Volatile Organics	1	402765			07/30/2008	1508	1.00000
Lab ID: 357238-3	Client ID: WG-1620-P10-071608	Date Re	cvd: 07/	16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION			PREP BT	#(S)			DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402237	100000		07/22/2008	1445	
SW-846 8270C SW-846 8260B	Semivolatile Organics, Low Level Volatile Organics			402237		07/31/2008	1427	1.00000
5W-040 020UB	volatile organics	1	402765			07/30/2008	1533	1.00000
Lab ID: 357238-4	Client ID: WG-1620-MW01A-071608					Date: 07/16/2		
METHOD	DESCRIPTION			PREP BT	#(S)	DATE/TIME A		DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve	el 1	402237	(00077		07/22/2008	1445	
SW-846 8270C SW-846 8270C	Semivolatile Organics, Low Level	1		402237		07/31/2008	1455	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1		402237 402237		08/01/2008 08/01/2008	1239 1547	5.00000
SW-846 8260B	Semivolatile Organics, Low Level Semivolatile Organics, Low Level Semivolatile Organics, Low Level Volatile Organics	1	402765	402637		07/30/2008	1559	1.00000
Lab ID: 357238-5	Client ID: WG-1620-FD01-071608		ovd• 07/	1672008	Samola	Date: 07/16/2	008	
METHOD	DESCRIPTION			PREP BT		DATE/TIME A		DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402237			07/22/2008	1445	
SW-846 8270C	Semivolatile Organics, Low Level	1		402237		07/31/2008	1522	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1		402237		08/01/2008	1305	5.00000
SW-846 8260B	Volatile Organics	1	402765			07/30/2008	1624	1.00000
Lab ID: 357238-6	Client ID: WG-1620-MW08-071608					Date: 07/16/2		
METHOD	DESCRIPTION			PREP BT	#(S)	DATE/TIME A		DILUTIO
SW-846 3510C SW-846 8270C	Extraction (Sep. Funnel) SVOC Low Level		402330	100770		07/23/2008	0800	
SW-846 8260B	Semivolatile Organics, Low Level Volatile Organics	1	402960	402330		07/31/2008 07/29/2008	1837 2303	1.00000
Lab ID: 357238-7 METHOD	Client ID: WG-1620-P12-071608 DESCRIPTION	Date Re	CVd: U//	16/2008	Sample	Date: 07/16/2		
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402330	PREP BT	#(5)	DATE/TIME A 07/23/2008		DILUTIC
SW-846 8270C	Semivolatile Organics, Low Level	1		402330		07/31/2008	1904	1.00000
SW-846 8260B	Volatile Organics	i	402679	402000		07/29/2008	2336	1.00000
ab ID: 357238-8	Client ID: WG-1620-P12-071608 MS	Date Re	cvd: 07/	16/2008	Sample	Date: 07/16/20	008	
METHOD	DESCRIPTION			PREP BT	#(S)	DATE/TIME A		DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402330		• - •	07/23/2008	0800	
SW-846 8270C	Semivolatile Organics, Low Level	1	402960	402330		07/31/2008	1932	1.00000
SW-846 8260B	Volatile Organics	1	402545			07/26/2008	1833	1.00000
ab ID: 357238-9	Client ID: WG-1620-P12-071608 MSD	Date Re	cvd: 07/	16/2008	Sample	Date: 07/16/20	008	
METHOD	DESCRIPTION	RUN#		PREP BT		DATE/TIME A		DILUTIO
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Leve		402330			07/23/2008	0800	
	Comission and a commutant to the set	1	100010			07 /74 ·0000	8000	4 00000
SW-846 8270C SW-846 8260B	Semivolatile Organics, Low Level Volatile Organics	1	402960	402330		07/31/2008 07/26/2008	2000	1.00000

F

Jop	L A B O R Number: 357238	ATORY C	I R O N I	CLE	Date:	08/11/2008		
CUSTOMER: Pastor,	Behling & Wheeler, LLC	PROJECT: 1620	HOUSTON	TX- WOO		ATTN: Eric Mat	zner	
Lab ID: 357238-10				/16/2008		Date: 07/16/2		
METHOD SW-846 3510C	DESCRIPTION	RUN		PREP BT	#(S)	DATE/TIME A		DILUTION
SW-846 8270C	Extraction (Sep. Funnel) SVOC Low L Semivolatile Organics, Low Level	evel 1	402237			07/22/2008	1445	
SW-846 8260B	Volatile Organics	1	402960	402237		07/31/2008 07/26/2008	1550 1855	1.00000
Lab ID: 357238-11	Client ID: WG-1620-TB04-071608	Data			- ·			
METHOD	DESCRIPTION			/16/2008		Date: 07/16/2	800	
SW-846 8260B	Volatile Organics	1	402524	PREP BT	#(5)	DATE/TIME A 07/26/2008	NALYZED 1740	DILUTION 1.00000
Lab ID: 357238-12	Client ID: WG-1620-MW02-071608	Doto	anude 07	14 13000	6 a mm 1 a	Data 07/4//0		
METHOD	DESCRIPTION		ECVO: U/	PREP BT	sampte #(s)	Date: 07/16/2 DATE/TIME A		D TI LITTON
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low L	evel 1			#(3)	07/23/2008	0800	DILUTION
SW-846 8270C	Semivolatile Organics, Low Level	1		402330		08/01/2008	1332	1.00000
SW-846 8260B	Volatile Organics	1	402524	102000		07/26/2008	1830	1.00000
Lab ID: 357238-13	Client ID: WG-1620-MW10A-071608	Date	ecvd: 07	/16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION	RUN	BATCH#	PREP BT	#(S)	DATE/TIME A		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low L	evel 1	402330			07/23/2008	0800	01201108
SW-846 8270C	Semivolatile Organics, Low Level	1	402960	402330		08/01/2008	1359	1.00000
SW-846 8260B	Volatile Organics	1	402524			07/26/2008	1626	1.00000
Lab ID: 357238-14	Client ID: WG-1620-MW10B-071608	Date	ecvd: 07,	/16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION	RUN		PREP BT	#(S)	DATE/TIME A		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low L	evel 1				07/23/2008	0800	
SW-846 8270C SW-846 8270C	Semivolatile Organics, Low Level Semivolatile Organics, Low Level Semivolatile Organics, Low Level	1		402330		08/01/2008	1426	1.00000
SW-846 8270C	Semivolatile Organics, Low Level	1		402330		08/01/2008	1614	2.00000
SW-846 8260B	Volatile Organics, LOW Level			402330		08/01/2008	1641	10.0000
3#-040 0200B	votatite organics	1	402524			07/26/2008	1651	1.00000
Lab ID: 357238-15	Client ID: WG-1620-MW11A-071608	Date I	ecvd: 07	/16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION	RUN	BATCH#	PREP BT	#(S)	DATE/TIME A		DILUTION
	Extraction (Sep. Funnel) SVOC Low L	evel 1	402330			07/23/2008	0800	
	Semivolatile Organics, Low Level	1		402330		08/01/2008	1453	1.00000
SW-846 8260B	Volatile Organics	1	402524			07/26/2008	1716	1.00000
Lab ID: 357238-16	Client ID: WG-1620-MW11B-071608	Date I	ecvd: 07/	16/2008	Sample	Date: 07/16/2	008	
METHOD	DESCRIPTION	RUN		PREP BT	#(S)	DATE/TIME A		DILUTION
SW-846 3510C	Extraction (Sep. Funnel) SVOC Low Lo	evel 1				07/23/2008	0800	
SW-846 8270C	Semivolatile Organics, Low Level Semivolatile Organics, Low Level	1		402330		08/01/2008	1520	1.00000
SW-846 8270C SW-846 8260B	Semivolatile Organics, Low Level Volatile Organics			402330		08/01/2008	1708	10.0000
<b>3W-04D OCOUB</b>	volatile Urganics	1	402524			07/26/2008	1805	1.00000

### LABORATORY CHRONICLE

Γ

DATA USABILITY SUMMARY

SITE:	Union Pacific Railroad Company (UPRR) Houston Wood Preserving Works Houston, Texas (PBW Project No. 1358-230)			
UPRR SITE ID:	Houston, TX – Wood Preserving Works (99000	484-HWPW)		
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW)			
EVENT:	Semi-Annual Compliance Monitoring – July 200	)8 (2H08)		
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:	TestAmerica Analytical Testing Corporation (Ho Work Order: 357238	puston, TX)		
TESTS/ METHODS:	Volatile Organics (VOC) Semivolatile Organics (SVOC)	SW-846 8260B SW-846 3510C/ 8270C		
SAMPLES:	Ten groundwater samples Two field duplicates One matrix spike/matrix spike duplicate (MS/MS One field blank One trip blank (See Table 1 for a complete listing of samples a			

QAA completed a third-party 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. QAA 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; 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, QAA 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 <u>+</u> MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13
- Aqueous Samples: <u>+</u> 2x MQL difference or 30% RPD (for field duplicates)

The results of the review are summarized in Table 2, which lists all of the qualified results for environmental samples. The checklists used by the reviewer are included as Attachment 1.

#### USABILITY SUMMARY

- 1. Usability Of Unqualified Non-Detects For all tests, non-detects are reported as less than the Sample Detection Limit (SDL) 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), <sup>GW</sup>GW<sub>Ing</sub>, for residential land use. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each target analyte, 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 biased low (JL or UJL) or estimated (J) 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 SDL 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. However, the concentration reported for detects or the SDL 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. Results for 2-Methylnaphthalene, Dibenzofuran, and Naphthalene in MW01A and its field duplicate (FD01) are qualified as estimated (J) due to poor precision for the field duplicate pair. For a conservative approach, the higher results (from the original sample) should be used. Data for Di-n-butyl Phthalate and Naphthalene are qualified as blank affected (U) due to the presence of these analytes in a laboratory blank and/or field blank at a comparable level. The analytes should be considered not detected at the reported concentration.

QAA Reviewer	
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Taryn G. Scholz (Name) 1/7/2009 (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 (0.1 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 (one for each day of sampling) 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 include a Result, MDL, MQL, and SDL. The MQL is unadjusted, i.e., does not include correction for sample-specific actions such as dilution or use of a smaller sample aliquot. Results are reported in mg/L. As required per TRRP, results for non-detects are reported as less than the SDL. The laboratory qualified results for detects between the SDL and the unadjusted MQL with a J-flag to indicate that the concentration is estimated. The DUQ includes a flag for the concentration being below the MQL (with adjustment for sample-specific actions) plus any other QC deficiencies. Results for some detects are reported from a dilution due to a high concentration, but there are no elevated reporting limits for a non-detect in any sample.
- 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 <sup>GW</sup>GW<sub>Ing</sub> in TCEQ Table 3 dated April 23, 2008). For each target analyte, the unadjusted MQL is at or below the LORP.
- 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 blanks do not contain any target analytes above the detection limit, which confirms that no contamination was introduced in the laboratory, except as follows:

Test	QC Batch	Analyte	Blank Concentration
SVOC	402237	Di-n-butyl Phthalate	0.000859 J mg/L
SVOC	402237	Naphthalene	0.000618 mg/L

QC PARAMETER		OME				
Laboratory Blanks	Test	QC Bato	h Analyte		Blank Conce	entration
	SVOC	402330	Di-n-but	yl Phthalate	0.000865	J mg/L
	(extracted	in the same	batch) at a level	in the samples a comparable to th on, 10 times for ph	at in the blank	(less than or
Field Blanks			-	get analytes abov oduced in the field		
	Test	Field Blank		Analyte	Blank Co	ncentration
	SVOC SVOC		B01-071608 B01-071608	Di-n-butyl Phtha Naphthalene		80 J mg/L 89 mg/L
	for this eve that in the	ent since all blank (less t as blank afi	were collected han or equal to	amples associate on the same date 5 times the blank that these analyte	e) at a level co concentration,	mparable to 10 times for
Laboratory Control Spike Recovery	batch and TRRP reco	reported recommended li	coveries for all t mits, which indi	ory Control Spike arget analytes. A cates good accura matrix effects, exc	Il recoveries an acy for the prep	e within the
	Test	QC Bato	ch Ai	nalyte	LCS %Red	covery
	SVOC SVOC	402237 402330		henol henol	32.9 42.9	
	reviewer o samples fo	ualified the	results (all no since all were	wer limit (but grea on-detects) in the extracted in one	associated s	samples (all
Matrix Spike Recovery	The laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) pair for each analytical batch, including one pair prepared using a sample from the site (P12) as indicated on the custody record, and reported the recoveries for all target analytes. For the P12 pair, all of the average recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation/ analysis technique on this particular sample matrix, except as follows:					
	Test	QC Batch	Parent Sample	ID Analyt	e MS	S/MSD %R
	SVOC SVOC	402330 402330	WG-1620-P12- WG-1620-P12-	•		55 30

QC PARAMETER	QCOUTCOME					
Matrix Spike Recovery	The recoveries are below the limit, and thus the reviewer qualified the detects and non-detects in the associated samples (samples extracted in the same batch) as estimated with a low bias (JL/ UJL).					
Surrogate Recovery	The laboratory added multiple surrogates to each sample for each test. All 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	For the MSD, all of the RPDs are within the TRRP recommended limits, which indicates good precision for the preparation/ analysis technique on this particular sample matrix.					
Field Duplicate Precision	Two field duplicate pairs were collected with the ten investigative samples. RPDs (or the difference between results for concentrations <5x MQL and non-detects) are within the TRRP criteria, except as follows:					
	Sample Date Original Sample ID Analyte FD RPD					
	7/16/2008WG-1620-MW01A-0716082-Methylnaphthalene132*7/16/2008WG-1620-MW01A-071608Dibenzofuran130*7/16/2008WG-1620-MW01A-071608Naphthalene137					
	*The difference is greater than <u>+</u> 2x MQL for these low-level results.					
	Thus, the criteria are met for all target analytes for one pair and for all but three target analytes for the second pair. Thus, there is no indication of a widespread field precision problem and the reviewer only qualified the original sample and field duplicate (FD01). Results were qualified as estimated (J) and, for a conservative approach, the higher results (from the original sample) should be used.					
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, the internal standard (IS) area counts and retention times were within method requirements.					

## TABLE 1 HOUSTON, TX – WOOD PRESERVING WORKS SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2008

#### SAMPLES COLLECTED

· · · · · · · · · · · · · · · · · · ·						
LAB ID	SAMPLE ID	SAMPLE	SAMPLE	TESTS	VOC	SVOC
		MATRIX	DATE		QC BATCH	QC BATCH
357238-001	WG-1620-FB01-071608 <sup>(1)</sup>	water	7/16/08	VOC, SVOC (A & B)	402545	402237
357238-002	WG-1620-MW07-071608	water	7/16/08	VOC, SVOC (A)	402765	402237
357238-003	WG-1620-P10-071608	water	7/16/08	VOC, SVOC (B)	402765	402237
357238-004	WG-1620-MW01A-071608	water	7/16/08	VOC, SVOC (A)	402765	402237
357238-005	WG-1620-FD01-071608 <sup>(2)</sup>	water	7/16/08	VOC, SVOC (A)	402765	402237
357238-006	WG-1620-MW08-290108	water	7/16/08	VOC, SVOC (A)	402679	402330
357238-007	WG-1620-P12-071608	water	7/16/08	VOC, SVOC (B)	402679	402330
357238-008	WG-1620-P12-071608 MS	water	7/16/08	VOC, SVOC (B)	402545	402330
357238-009	WG-1620-P12-071608 MSD	water	7/16/08	VOC, SVOC (B)	402545	402330
357238-010	WG-1620-FD02-071608 <sup>(3)</sup>	water	7/16/08	VOC, SVOC (B)	402524	402237
357238-011	WG-1620-TB04-071608 <sup>(4)</sup>	water	7/16/08	VOC	402524	NA
357238-012	WG-1620-MW02-071608	water	7/16/08	VOC, SVOC (A)	402524	402330
357238-013	WG-1620-MW10A-071608	water	7/16/08	VOC, SVOC (A)	402524	402330
357238-014	WG-1620-MW10B-071608	water	7/16/08	VOC, SVOC (B)	402524	402330
357238-015	WG-1620-MW11A-071608	water	7/16/08	VOC, SVOC (A)	402524	402330
357238-016	WG-1620-MW11B-071608	water	7/16/08	VOC, SVOC (B)	402524	402330

(1) Field blank

(2) Field duplicate of WG-1620-MW01A-071608

(3) Field duplicate of WG-1620-P12-071608

(4) Trip blank

. .

#### TARGET ANALYTES

Valatila Organica (VOC)	Semivolatile Organics (SVOC)	Semivolatile Organics (SVOC)
Volatile Organics (VOC)	A-Transmissive Zone (A list)	B-Transmissive Zone (B list)
1,2-Dichloroethane	2-Methylnaphthalene	Acenaphthene
Benzene	Acenaphthene	Acenaphthylene
Chlorobenzene	Acenaphthylene	Anthracene
Ethylbenzene	Anthracene	bis(2-Ethylhexyl)phthalate
Methylene Chloride	bis(2-Ethylhexyl)phthalate	Dibenzofuran
Toluene	Dibenzofuran	Di-n-butyl Phthalate
Xylenes (total)	Fluoranthene	Fluoranthene
	Fluorene	Fluorene
	Naphthalene	Naphthalene
	Phenanthrene	Phenol
	Pyrene	Pyrene

### TABLE 2

## HOUSTON, TX – WOOD PRESERVING WORKS SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2008

### QUALIFIED SAMPLE RESULTS

LAB ID	SAMPLE ID	ANALYTE	DUQ	REASON
357238-002	WG-1620-MW07-071608	Acenaphthylene	J	Result is between SDL and MQL
		Naphthalene	U	Laboratory blank contamination (0.000618 mg/L); Field blank contamination (0.000689 mg/L)
		Phenanthrene	J	Result is between SDL and MQL
357238-003	WG-1620-P10-071608	bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Di-n-butyl Phthalate	U	Laboratory blank contamination (0.000859 J mg/L); Field blank contamination (0.000960 J mg/L); Result is between SDL and MQL
		Fluoranthene	J	Result is between SDL and MQL
		Naphthalene	U	Laboratory blank contamination (0.000618 mg/L); Field blank contamination (0.000689 mg/L)
		Phenol	UJL	Low LCS recovery (32.9%)
357238-004	WG-1620-MW01A-071608	2-Methylnaphthalene	J	Poor precision (Difference > $\pm 2x$ MQL) for field duplicate pair collected at this location
		bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Dibenzofuran	J	Poor precision (Difference > $\pm 2x$ MQL) for field duplicate pair collected at this location
		Naphthalene	J	Poor precision (137 RPD) for field duplicate pair collected at this location
357238-005	WG-1620-FD01-071608	2-Methylnaphthalene	J	Poor precision (Difference > $\pm 2x$ MQL) for field duplicate pair collected at this location
		bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Dibenzofuran	J	Poor precision (Difference > $\pm 2x$ MQL) for field duplicate pair collected at this location
		Naphthalene	U	Field blank contamination (0.000689 mg/L); Poor precision (137 RPD) for field duplicate pair collected at this location
357238-006	WG-1620-MW08-290108	Acenaphthylene	J	Result is between SDL and MQL
		Naphthalene	U	Field blank contamination (0.000689 mg/L); Low ave recovery (55%) for MS/MSD prepared using sample from P12
		Phenanthrene	J	Result is between SDL and MQL

### TABLE 2

## HOUSTON, TX – WOOD PRESERVING WORKS SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2008

### QUALIFIED SAMPLE RESULTS

LAB ID	SAMPLE ID	ANALYTE	DUQ	REASON
357238-007	WG-1620-P12-071608	bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Di-n-butyl Phthalate	U	Laboratory blank contamination (0.000865 J mg/L); Field blank contamination (0.000960 J mg/L); Result is between SDL and MQL
		Naphthalene	U	Field blank contamination (0.000689 mg/L); Low ave recovery (55%) for MS/MSD prepared using sample from P12
		Phenol	UJL	Low LCS recovery (42.9%); Low ave recovery (30%) for MS/MSD prepared using sample from P12
357238-010	WG-1620-FD02-071608	bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Di-n-butyl Phthalate	U	Laboratory blank contamination (0.000859 J mg/L); Field blank contamination (0.000960 J mg/L); Result is between SDL and MQL
		Naphthalene	U	Laboratory blank contamination (0.000618 mg/L); Field blank contamination (0.000689 mg/L)
		Phenol	UJL	Low LCS recovery (32.9%)
357238-012	WG-1620-MW02-071608	Acenaphthylene	J	Result is between SDL and MQL
		Anthracene	J	Result is between SDL and MQL
		Naphthalene	U	Field blank contamination (0.000689 mg/L); Low ave recovery (55%) for MS/MSD prepared using sample from P12
		Pyrene	J	Result is between SDL and MQL
357238-013	WG-1620-MW10A-071608	bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Naphthalene	UJL	Low ave recovery (55%) for MS/MSD prepared using sample from P12
357238-014	WG-1620-MW10B-071608	bis(2-Ethylhexyl)phthalate	J	Result is between SDL and MQL
		Naphthalene	JL	Low ave recovery (55%) for MS/MSD prepared using sample from P12
		Phenol	UJL	Low LCS recovery (42.9%); Low ave recovery (30%) for MS/MSD prepared using sample from P12
357238-015	WG-1620-MW11A-071608	Naphthalene	UJL	Low ave recovery (55%) for MS/MSD prepared using sample from P12

#### TABLE 2

## HOUSTON, TX – WOOD PRESERVING WORKS SEMI-ANNUAL COMPLIANCE MONITORING – JULY 2008

### QUALIFIED SAMPLE RESULTS

LAB ID	SAMPLE ID	ANALYTE	DUQ	REASON
357238-016	WG-1620-MW11B-071608	Naphthalene	JL	Low ave recovery (55%) for MS/MSD prepared using sample from P12
		Phenol	UJL	Low LCS recovery (42.9%); Low ave recovery (30%) for MS/MSD prepared using sample from P12

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 detection limit (SDL) however, the SDL 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

Client Name: Pastor, Behling & Wheeler, LLC		Project	Number	: 1358-230 (2H08)
Site Name: UPRR HWPW 99000484				r: Eric Matzner
Laboratory: TestAmerica Houston				No: 357238
Reviewer: Taryn Scholz			necked:	
Parameters: VOC, SVOC				3, 3510C/ 8270C
ITEM	YES			COMMENTS
Signed Cover Page included?	X			COMMENTO
R1 Date of sample collection included?	x			
R1 Sample temp (2-6 C)?	x			
R1 COCs properly executed and seals used?	x			no seals (hand-deliv); no.1 Received By time shows gap
R1 Samples rec'd within 2 days of collection?	x			
R2 Field, Laboratory, and Batch ID included?	X		1	batch ID on sample results
R3 Date of analysis included?	x	1		
R3 Date of sample preparation included?	X			
	-			
R3 NDs at SDL and MQLs included?				MQLs are unadjusted, i.e. no dil correction, J-vaues correct; MDL look
	×	ļ		incorrect for Aceny but SDL and RRs ok so no action
R3 Holding time to analysis not expired?	x			VOC - 14 days; SVOC - 40 days
R3 Holding time to preparation not expired?	X	<b>_</b>	<u> </u>	SVOC - 7 days
R3 No elevated reporting limits for NDs?	×			some TAs reported from dilution due to high conc (NDs at no dilution)
R3 Method references included?	Х			
R3 Sample matrix included?	х			
R3 Sample results included?	Х			
R3 Soils on dry weight?			х	
R9 Evaluate unadjusted MQLs? ( <lorps)< td=""><td>X</td><td></td><td></td><td></td></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			100
S10 MDLs reasonable per DCS or LCS?	X			per LRC
FN1 Field instruments calibrated daily? FN2 Well conditions constant before sampling?	<u>x</u>			
FN2 View conditions constant before sampling?	X X			(VOC pH<2, 4 C; SVOC G, 4 C)
FN4 Samples filtered? If so, give turbid/size	<b>^</b>		x	no metals
FN5 Sampling sequence from low to high conc?			x	dedicated tubing
Definitions: AA - Atomic Absorption; %D - Percent Differ Limit; %R - Percent Recovery; RF - Response Factor; RP COMMENTS	D - Relativ	- Inducti e Percer	vely Cou It Differe	upled Plasma; IDL - Instrument Detection Limit; MDL - Method Detectio nce; RRT - Relative Retention Time; RSD - Relative Standard Deviation
			_	
			-	

	Usability Review Checklist: GC/MS ame: Pastor, Behling & Wheeler, LLC	Project	Number	: 1358-23	30 (2H08)
Lito No.	me: UPRR HWPW 99000484			r: Eric Ma	
	ory: TestAmerica Houston			No: 3572	
	er: Tarvn Scholz		necked:		
	ters: VOC - 7 TAs		s: 8260E		
arame	ITEM	YES		N/A	COMMENTS
			NO	N/A	CONIMENTS
۲4	Surrogate data included in lab package?	x			
	Required surrogates included?	X		<u>                                      </u>	
	%R criteria met? ( <i>lab limits below</i> ) Reject <10%	x			
	Area within limits? (within -50/+100% of last calib chk)?			x	· · · · · · · · · · · · · · · · · · ·
	RRT within limits? (<30 sec diff from last calib chk?)			<u> </u>	
85	Method blank data included in Lab Package?	x x			
	Criteria met? ( <mdl) (<mdl)<="" blanks?="" criteria="" field="" for="" met="" td=""><td>x</td><td></td><td></td><td></td></mdl)>	x			
<u>.</u>	QC check samples/LCS data included in lab package?			+	
86	all project COCs or TAs included?	x x	<u> </u>	ł	· · · · · · · · · · · · · · · · · · ·
	%R criteria met? (TRRP 60-140%) Reject <10%	X	<u> </u>		
	RPD criteria met? (TRRP 40%)	<u> </u>		x	
17	Matrix spike data included in lab package?			+ ^	······································
87		x x	<u> </u>		
	%R criteria met? ( <i>TRRP 60-140%</i> ) Reject <10% RPD criteria met? ( <i>TRRP 40%</i> )	x			· · · · · · · · · · · · · · · · · · ·
	Field dup RPD criteria met? (TRRP 40%)	x	-		
	Initial calibration documentation included in lab package?	- ×	x –	<u> </u>	
51	all target analytes included?	x	<u>  ^ </u>	<u> </u>	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)	×		1	per LRC
32	Calibration verification data included in lab package?		x		
2	RRF met SPCCs/TAs(0.05/0.01)? SPCC RRF<0.05 reject	x	<u> </u>		per LRC
	%D criteria met for CCC/ <i>TAs</i> ? (20% Max, Qualify >25%D)	x		+	per LRC
3	Instrument Tune for GC/MS included in lab package?	<u> </u>	×	+	
53 54	Internal standard data included in lab package?		x	-	
	Areas within limits (within -50/+100% of last calib check)?	×			per LRC
	RTs within limits (<30 sec diff from last calib check)?	x		<u>+</u>	per LRC
24	Surrogate Control Limits	<u> </u>			
~~	12DCED 70-130				
	BRFLBE 70-130				······································
	DBRFLM 70-130				· · · · · · · · · · · · · · · · · · ·
	TOLD8 70-130				
OMARA	ENTS	I	1	1	I
					· · · · · · · · · · · · · · · · · · ·
	· · · · ·				
					· · · · · · · · · · · · · · · · · · ·

VOC Batches

all ND - no flags		qdd		Anlyt	Anlyt		Lab	)	l (del)	MBLK	FBLK		60-140	40	60-140	60-140 30%/ +-2MQL
LAB ID	Collect	Collect TA/MQL	Ц	Date	Batch	HT ok?	Flag	LRC	su (	(ng/L)	(ng/L)	di d/SM	MS/D %R	MS/D RPD	LCS %R FDUP	FDUP
357238-010 WG-1620-FD02-071608	7/16/2008 7/ 5,15	7/ 5,15	-	7/26	402524	У	QN	2 SUs out for MSD	٩	QN		extant	٩	۵.	٩	۵
357238-011 WG-1620-TB04-071608	7/16/2008 7/ 5,15	7/5,15	-	7/26	402524	Y	Q	(no effect on smpls)	٩		Q					
357238-012 WG-1620-MW02-071608	7/16/2008	7/ 5,15	-	7/26	402524	У	QN		٩.							
357238-013 WG-1620-MW10A-071608	7/16/2008 7/ 5,15	7/ 5,15	~	7/26	402524	У	QN		۵.							
357238-014 WG-1620-MW10B-071608	7/16/2008 7/ 5,15	7/5,15	-	7/26	402524	Y	Q		٩.							
357238-015 WG-1620-MW11A-071608	7/16/2008 7/ 5,15	7/ 5,15	~	7/26	402524	У	Q		م							
357238-016 WG-1620-MW11B-071608	7/16/2008 7/ 5,15	7/5,15	-	7/26	402524	У	Q		٩.							
357238-001 WG-1620-FB01-071608	7/16/2008 7/ 5,15	7/ 5,15	٣	7/27	402545	Y	Q		۵.	QN	QN	WG-1620-P12-071608	٩	٩	۵.	
357238-006 WG-1620-MW08-290108	7/16/2008 7/ 5,15	7/ 5,15	-	7/29	402679	Y	Q		٩.	QN		extant	P (3 TAs only)	P (3 TAs only)	۵.	
357238-007 WG-1620-P12-071608	7/16/2008	7/ 5,15		7/29	402679	Y	QN		۵.							
357238-002 WG-1620-MW07-071608	7/16/2008 7/ 5,15	7/ 5,15	۳	7/30	402765	~	Q		۵.	QN		extant	P (3 TAs only)	(3 TAs only) P (3 TAs only)	٩	
357238-003 WG-1620-P10-071608	7/16/2008 7/ 5,15	7/ 5,15	-	7/30	402765	У	Q		۵.							
357238-004 WG-1620-MW01A-071608	7/16/2008 7/ 5,15	7/ 5,15	~	7/30	402765	Ъ	QN		۵.							
357238-005 WG-1620-FD01-071608	7/16/2008 7/ 5,15	7/ 5,15	<del></del>	7/30	402765	Ъ	QN		۵							۵.

Jient r	lame: Pastor, Behling & Wheeler,	LLC	Project	Number	: 1358-23	30 (2H08)
Site Na	me: UPRR HWPW 99000484		Project	Manage	r: Eric M	atzner
abora	tory: TestAmerica Houston				No: 3572	
	er: Taryn Scholz			hecked:		
	eters: SVOC - 11 PAHs				C/ 8270C	
		ITEM		NO		COMMENTS
<u>.</u> 4	Surrogate data included in lab		X			Southing to the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s
	Required surrogates included?		x			
	%R criteria met? ( <i>lab limits be</i>		Â			
	Area within limits? (within -50/-		<u> ^</u>	<u> </u>	×	
	RRT within limits? (<30 sec diff				Â	
5	Method blank data included in				<u> </u>	
•	Criteria met? ( <mdl)< td=""><td></td><td>X</td><td>x</td><td></td><td>see attached</td></mdl)<>		X	x		see attached
	Criteria met for field blanks? (<		<u> </u>	x		see attached
3	QC check samples/LCS data in		x	<u>^</u>		
5	all project COCs or TAs include					
	%R criteria met? (TRRP 60-14		×	~		loop attached
	RPD criteria met? (TRRP 60-74			X	x	see attached
7	Matrix spike data included in la		x	1	+^-	
'	%R criteria met? (TRRP 60-14		× ×		<u> </u>	see attached
	RPD criteria met? (TRRP 60-14		<u> </u>	x		see attached
	Field dup RPD criteria met? (TRRP 40%		×			soo attached
1	Initial calibration documentation			x		see attached
'	all target analytes included?	полиси плав раскауе?		×		por LBC
	RRF met SPCCs/TAs(0.05/0.0	112 SPCC PPEZO 05 reject	<u>x</u>	<u> </u>		per LRC
		TAs? (<30% RSD for CCC, >15% RSD must	x	<u> </u>		per LRC
		TAS? (<30% RSD for CCC, >15% RSD must	x			
2	have fit)	uded in Joh neeksee?		<u> </u>		per LRC
2	Calibration verification data inc			×		
	RRF met SPCCs/TAs(0.05/0.0		X	ļ		per LRC
	%D criteria met for CCC/TAs?		×	<u> </u>	ļ	per LRC
3	Instrument Tune for GC/MS inc		<u> </u>	<u>×</u>	I	
4	Internal standard data included			×		
	Areas within limits (within -50/+		x			per LRC
-	RTs within limits (<30 sec diff fi		X			per LRC
4	Surrogate	Control Limits				
	246TBP	10-123		<u> </u>		
	2FBP	43-116				
	2FP	21-100				
	d5NB	35-114				
	d6PH	10-94				· _ ·
OMM	d14TERP	33-141				
						······································
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40	MS/D RPD	٩									٩	3 JL; 13,15 UJL)		4,16 ND)						
60-140	MS/D %R	Anthr 53	bis2ehPh57	Naph 45	Phenol 22	no flags, extant					Naph 55	->JL/UJL to RRs/NDs (7,12,14,16 JL; 13,15 UJL)	Phenol 30	->JL/UJL to RRs/NDs (7,14,16 ND)						
	DI D/SW	extant									WG-1620-P12-071608 Naph 55	->JL/UJL to RRs		->11/11						
FBLK	(ng/L)	DnBPh 0.96 J	: ->U to RRs <9.6	3,7,10	Naph 0.689	: ->U to RRs <3.445	2,3,5,6,7,10,12													
MBLK	(ng/L)	DnBPh 0.85928 J DnBPh 0.96 J	P ->U to RRs <8.5928 ->U to RRs <9.6	3,10	Naph 0.61796	->U to RRs <3.0898 ->U to RRs <3.445	2,3,10				DnBPh 0.86527		7							
(lab)	SU	٩	۵.	٩	٩	۵.	٩	٩	٩	۵.	۵.	٩	۵.	۵.	۵.	۵.	٩	۵.	۵.	٩
	LRC	Naph >MQL in MB;	DnBPh >MDL in MB;	several elev SDL due	to dilution (all detects)															
Lab	Flag	<u>ل</u>	2 J	3J	Ļ	none	none	L t	none	2 J	2 J	2 J	3J	L1	L۱	none	none	none	none	none
	HT ok?	γ	7	7	ъ	7	Х	7	~	7	У	У	У	7	7	7	У	~	~	Ъ
Anlyt	Batch	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960	402960
Anlyt	Date	7/31	7/31	7/31	7/31	8/1	8/1	7/31	8/1	7/31	7/31	7/31	8/1	8/1	8/1	8/1	8/1	8/1	8/1	8/1
Prep	Batch	102237	402237	402237	402237	402237	402237	402237	402237	402237	402330	402330	402330	402330	402330	402330	402330	402330	402330	402330
Prep	Date	7122 4	7122 4	7122 4	7122 4	7122 4	7122 4	7122 4	7122 4	7122 4	7/23 4	7123 4	7123 4	7123 4	7123 4	7123 4	7123 4	7/23 4	7/23 4	7123 4
	Ч	<del></del>	<del>.</del>	<del></del>	<del>.</del>	vo	6	-	س	-	<del>.</del>	-	-	<del>.</del>	<del>.</del>	~	5	-	÷	6
qdd	Collect TA/MQL	7/16/2008 11/0.5-2.5	7/16/2008	7/16/2008	7/16/2008	7/16/2008 Fire	7/16/2008 Acene	7/16/2008	7/16/2008 Acene, Flre	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008	7/16/2008 DBzF	7/16/2008 Acene, Fire	7/16/2008	7/16/2008	7/16/2008 Naph,Acene,Fire
		WG-1620-FB01-071608	WG-1620-MW07-071608	WG-1620-P10-071608	WG-1620-MW01A-071608	357238-004DL WG-1620-MW01A-071608 7/16/2008 Fire	357238-004DL1 WG-1620-MW01A-071608 7/16/2008 Acene	357238-005 WG-1620-FD01-071608	357238-005DL WG-1620-FD01-071608	357238-010 WG-1620-FD02-071608	WG-1620-MW08-290108	WG-1620-P12-071608	WG-1620-MW02-071608	WG-1620-MW10A-071608	357238-014 WG-1620-MW10B-071608 7/16/2008	357238-014DL WG-1620-MW10B-071608 7/16/2008 DBzF	357238-014DL1 WG-1620-MW10B-071608 7/16/2008 Acene, Fire	357238-015 WG-1620-MW11A-071608 7/16/2008	357238-016 WG-1620-MW11B-071608 7/16/2008	357238-016DL WG-1620-MW11B-071608 7/16/2008 Naph,Acene,Fire
	LAB ID	357238-001	357238-002	357238-003	357238-004	357238-004DL	357238-004DL:	357238-005	357238-005DL	357238-010	357238-006	357238-007	357238-012	357238-013	357238-014	357238-014DL	357238-014DL1	357238-015	357238-016	357238-016DL

Page 5 of 6

60-140 30%/ +-2MQL	LCS %R FDUP	Phenol 32.9	>JL/UJL to RRs/NDs (3,10 ND)			->J to these RRs	2MeNaph hi Diff	DBzF hi Diff	Naph 137 (blank affected)	٩	Phenol 42.9	->JL/UJL to RRs/NDs (7,14,16 ND)			-					
		WG-1620-FB01-071608	WG-1620-MW07-071608	WG-1620-P10-071608	WG-1620-MW01A-071608	357238-004DL WG-1620-MW01A-071608	357238-004DL1 WG-1620-MW01A-071608	WG-1620-FD01-071608	WG-1620-FD01-071608	WG-1620-FD02-0716Q8	WG-1620-MW08-290108	WG-1620-P12-071608	WG-1620-MW02-071608	WG-1620-MW10A-071608	WG-1620-MW10B-071608	357238-014DL WG-1620-MW10B-071608	357238-014DL1 WG-1620-MW10B-071608	WG-1620-MW11A-071608	WG-1620-MW11B-071608	357238-016DL WG-1620-MW11B-071608
	LAB ID	357238-001	357238-002	357238-003	357238-004	357238-004DL	357238-004DL1	357238-005	357238-005DL	357238-010	357238-006	357238-007	357238-012	357238-013	357238-014	357238-014DL	357238-014DL1	357238-015	357238-016	357238-016DL

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## APPENDIX D UPDATED COMPLIANCE SCHEDULE