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February 20, 2018

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

Work Order: **HS18020223**

Laboratory Results for: **Houston TX-Wood Preserving Works**

Dear Eric,

ALS Environmental received 1 sample(s) on Feb 05, 2018 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: Dane.Wacasey
Dane J. Wacasey

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
Work Order: HS18020223

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS18020223-01	SO-1620-IDW-20180203	Soil		03-Feb-2018 10:00	05-Feb-2018 07:33	<input type="checkbox"/>

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
Work Order: HS18020223

CASE NARRATIVE

GC Semivolatiles by Method TX1005

Batch ID: 125027

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

GCMS Semivolatiles by Method SW8270

Batch ID: 125113

Sample ID: HS18020229-14MS

- MS and MSD are for an unrelated sample

Sample ID: HS18020229-14MSD

- MSD is for an unrelated sample

Sample ID: HS18020320-04MS

- MS and MSD are for an unrelated sample

Sample ID: HS18020320-04MSD

- MSD is for an unrelated sample
-

GCMS Volatiles by Method SW8260

Batch ID: R310285

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Metals by Method SW7470

Batch ID: 125107

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Metals by Method SW1311/6020

Batch ID: 125106

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.
-

Client: Pastor, Behling & Wheeler, LLC
 Project: Houston TX-Wood Preserving Works
 Sample ID: SO-1620-IDW-20180203
 Collection Date: 03-Feb-2018 10:00

ANALYTICAL REPORT
 WorkOrder:HS18020223
 Lab ID:HS18020223-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MLL	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES BY SW8260C		Method:SW8260		Analyst: WLR			
Benzene	U		0.00050	0.0050	mg/Kg	1	07-Feb-2018 02:36
Ethylbenzene	U		0.00070	0.0050	mg/Kg	1	07-Feb-2018 02:36
m,p-Xylene	U		0.0016	0.010	mg/Kg	1	07-Feb-2018 02:36
o-Xylene	U		0.0010	0.0050	mg/Kg	1	07-Feb-2018 02:36
Toluene	U		0.00060	0.0050	mg/Kg	1	07-Feb-2018 02:36
Xylenes, Total	U		0.0010	0.0050	mg/Kg	1	07-Feb-2018 02:36
<i>Surr: 1,2-Dichloroethane-d4</i>		<i>101</i>		<i>70-126</i>	<i>%REC</i>	<i>1</i>	<i>07-Feb-2018 02:36</i>
<i>Surr: 4-Bromofluorobenzene</i>		<i>94.6</i>		<i>73-120</i>	<i>%REC</i>	<i>1</i>	<i>07-Feb-2018 02:36</i>
<i>Surr: Dibromofluoromethane</i>		<i>95.5</i>		<i>70-130</i>	<i>%REC</i>	<i>1</i>	<i>07-Feb-2018 02:36</i>
<i>Surr: Toluene-d8</i>		<i>97.1</i>		<i>82-121</i>	<i>%REC</i>	<i>1</i>	<i>07-Feb-2018 02:36</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
 Project: Houston TX-Wood Preserving Works
 Sample ID: SO-1620-IDW-20180203
 Collection Date: 03-Feb-2018 10:00

ANALYTICAL REPORT
 WorkOrder:HS18020223
 Lab ID:HS18020223-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW-LEVEL SEMIVOLATILES BY 8270D			Method:SW8270			Prep:SW3541 / 08-Feb-2018	Analyst: GEY
1,2,4-Trichlorobenzene	U		0.0012	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,4,5-Trichlorophenol	U		0.0025	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,4,6-Trichlorophenol	U		0.0017	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,4-Dichlorophenol	U		0.0013	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,4-Dimethylphenol	U		0.0033	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,4-Dinitrophenol	U		0.0045	0.013	mg/Kg	1	15-Feb-2018 16:27
2,4-Dinitrotoluene	U		0.00090	0.0066	mg/Kg	1	15-Feb-2018 16:27
2,6-Dinitrotoluene	U		0.0033	0.0066	mg/Kg	1	15-Feb-2018 16:27
2-Chloronaphthalene	U		0.0013	0.0066	mg/Kg	1	15-Feb-2018 16:27
2-Chlorophenol	U		0.0013	0.0066	mg/Kg	1	15-Feb-2018 16:27
2-Methylnaphthalene	0.14		0.00050	0.0033	mg/Kg	1	15-Feb-2018 16:27
2-Methylphenol	U		0.0011	0.0066	mg/Kg	1	15-Feb-2018 16:27
2-Nitroaniline	U		0.0019	0.0066	mg/Kg	1	15-Feb-2018 16:27
2-Nitrophenol	U		0.0025	0.0066	mg/Kg	1	15-Feb-2018 16:27
3&4-Methylphenol	U		0.0010	0.0066	mg/Kg	1	15-Feb-2018 16:27
3,3'-Dichlorobenzidine	U		0.0025	0.0066	mg/Kg	1	15-Feb-2018 16:27
3-Nitroaniline	U		0.0019	0.0066	mg/Kg	1	15-Feb-2018 16:27
4,6-Dinitro-2-methylphenol	U		0.0021	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Bromophenyl phenyl ether	U		0.0016	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Chloro-3-methylphenol	U		0.00070	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Chloroaniline	U		0.0011	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Chlorophenyl phenyl ether	U		0.0015	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Nitroaniline	U		0.0022	0.0066	mg/Kg	1	15-Feb-2018 16:27
4-Nitrophenol	U		0.0019	0.013	mg/Kg	1	15-Feb-2018 16:27
Acenaphthene	U		0.00050	0.0033	mg/Kg	1	15-Feb-2018 16:27
Acenaphthylene	U		0.0010	0.0033	mg/Kg	1	15-Feb-2018 16:27
Anthracene	U		0.00050	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benz(a)anthracene	U		0.0016	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benzidine	U		0.0014	0.0066	mg/Kg	1	15-Feb-2018 16:27
Benzo(a)pyrene	U		0.0010	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benzo(b)fluoranthene	U		0.0012	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benzo(g,h,i)perylene	U		0.00070	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benzo(k)fluoranthene	U		0.00090	0.0033	mg/Kg	1	15-Feb-2018 16:27
Benzyl alcohol	U		0.00070	0.0066	mg/Kg	1	15-Feb-2018 16:27
Bis(2-chloroethoxy)methane	U		0.00090	0.0066	mg/Kg	1	15-Feb-2018 16:27
Bis(2-chloroethyl)ether	U		0.0011	0.0066	mg/Kg	1	15-Feb-2018 16:27
Bis(2-chloroisopropyl)ether	U		0.0014	0.0066	mg/Kg	1	15-Feb-2018 16:27
Bis(2-ethylhexyl)phthalate	U		0.0017	0.0066	mg/Kg	1	15-Feb-2018 16:27

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
 Project: Houston TX-Wood Preserving Works
 Sample ID: SO-1620-IDW-20180203
 Collection Date: 03-Feb-2018 10:00

ANALYTICAL REPORT
 WorkOrder:HS18020223
 Lab ID:HS18020223-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MQL	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW-LEVEL SEMIVOLATILES BY 8270D			Method:SW8270			Prep:SW3541 / 08-Feb-2018	Analyst: GEY
Butyl benzyl phthalate		U	0.0013	0.0066	mg/Kg	1	15-Feb-2018 16:27
Carbazole		U	0.0012	0.0066	mg/Kg	1	15-Feb-2018 16:27
Chrysene		U	0.00080	0.0033	mg/Kg	1	15-Feb-2018 16:27
Dibenz(a,h)anthracene		U	0.0016	0.0033	mg/Kg	1	15-Feb-2018 16:27
Dibenzofuran		U	0.00070	0.0033	mg/Kg	1	15-Feb-2018 16:27
Diethyl phthalate		U	0.0010	0.0066	mg/Kg	1	15-Feb-2018 16:27
Dimethyl phthalate		U	0.00080	0.0066	mg/Kg	1	15-Feb-2018 16:27
Di-n-butyl phthalate		U	0.0012	0.0066	mg/Kg	1	15-Feb-2018 16:27
Di-n-octyl phthalate		U	0.00090	0.0066	mg/Kg	1	15-Feb-2018 16:27
Fluoranthene		U	0.0011	0.0033	mg/Kg	1	15-Feb-2018 16:27
Fluorene	0.020		0.0011	0.0033	mg/Kg	1	15-Feb-2018 16:27
Hexachlorobenzene		U	0.00090	0.0066	mg/Kg	1	15-Feb-2018 16:27
Hexachlorobutadiene		U	0.0012	0.0066	mg/Kg	1	15-Feb-2018 16:27
Hexachlorocyclopentadiene		U	0.00080	0.0066	mg/Kg	1	15-Feb-2018 16:27
Hexachloroethane		U	0.0015	0.0066	mg/Kg	1	15-Feb-2018 16:27
Indeno(1,2,3-cd)pyrene		U	0.00080	0.0033	mg/Kg	1	15-Feb-2018 16:27
Isophorone		U	0.00080	0.0066	mg/Kg	1	15-Feb-2018 16:27
Naphthalene		U	0.00060	0.0033	mg/Kg	1	15-Feb-2018 16:27
Nitrobenzene		U	0.00090	0.0066	mg/Kg	1	15-Feb-2018 16:27
N-Nitrosodimethylamine		U	0.0012	0.0066	mg/Kg	1	15-Feb-2018 16:27
N-Nitrosodi-n-propylamine		U	0.0011	0.0066	mg/Kg	1	15-Feb-2018 16:27
N-Nitrosodiphenylamine		U	0.00070	0.0066	mg/Kg	1	15-Feb-2018 16:27
Pentachlorophenol		U	0.0033	0.0066	mg/Kg	1	15-Feb-2018 16:27
Phenanthrene	0.061		0.0015	0.0033	mg/Kg	1	15-Feb-2018 16:27
Phenol		U	0.0011	0.0066	mg/Kg	1	15-Feb-2018 16:27
Pyrene		U	0.00060	0.0033	mg/Kg	1	15-Feb-2018 16:27
<i>Surr: 2,4,6-Tribromophenol</i>	<i>54.8</i>			<i>36-126</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>77.2</i>			<i>43-125</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>
<i>Surr: 2-Fluorophenol</i>	<i>68.7</i>			<i>37-125</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>81.0</i>			<i>32-125</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>
<i>Surr: Nitrobenzene-d5</i>	<i>76.3</i>			<i>37-125</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>
<i>Surr: Phenol-d6</i>	<i>76.7</i>			<i>40-125</i>	<i>%REC</i>	<i>1</i>	<i>15-Feb-2018 16:27</i>

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
 Project: Houston TX-Wood Preserving Works
 Sample ID: SO-1620-IDW-20180203
 Collection Date: 03-Feb-2018 10:00

ANALYTICAL REPORT
 WorkOrder:HS18020223
 Lab ID:HS18020223-01
 Matrix:Soil

ANALYSES	RESULT	QUAL	SDL	MLL	UNITS	DILUTION FACTOR	DATE ANALYZED
TEXAS TPH BY TX1005		Method:TX1005		Prep:TX1005PR / 06-Feb-2018		Analyst: MBG	
nC6 to nC12	U		5.9	40	mg/Kg	1	07-Feb-2018 17:42
>nC12 to nC28	U		7.8	40	mg/Kg	1	07-Feb-2018 17:42
>nC28 to nC35	U		7.8	40	mg/Kg	1	07-Feb-2018 17:42
Total Petroleum Hydrocarbon	U		5.9	40	mg/Kg	1	07-Feb-2018 17:42
Surr: 2-Fluorobiphenyl	85.4			70-130	%REC	1	07-Feb-2018 17:42
Surr: Trifluoromethyl benzene	97.8			70-130	%REC	1	07-Feb-2018 17:42
TCLP METALS BY SW6020A		Method:SW1311/6020		Leache:SW1311 / 08-Feb-2018		Prep:SW3010A / 08-Feb-2018 Analyst: JDE	
Arsenic	U		0.00400	0.0500	mg/L	1	08-Feb-2018 19:43
Barium	1.33		0.0190	0.200	mg/L	1	08-Feb-2018 19:43
Cadmium	U		0.00200	0.0500	mg/L	1	08-Feb-2018 19:43
Chromium	U		0.00400	0.0500	mg/L	1	08-Feb-2018 19:43
Lead	U		0.00600	0.0500	mg/L	1	08-Feb-2018 19:43
Selenium	U		0.0110	0.0500	mg/L	1	08-Feb-2018 19:43
Silver	U		0.00200	0.0500	mg/L	1	08-Feb-2018 19:43
TCLP MERCURY BY SW7470A		Method:SW7470		Leache:SW1311 / 08-Feb-2018		Prep:SW7470 / 08-Feb-2018 Analyst: JBA	
Mercury	U		0.0000300	0.000200	mg/L	1	09-Feb-2018 10:55

Note: See Qualifiers Page for a list of qualifiers and their explanation.

WEIGHT LOG

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

Batch ID: 2272 **Method:** VOLATILES BY SW8260C

SampleID	Container	Sample Wt/Vol	Final Volume	Weight Factor	Container Type
HS18020223-01	1	5.015 (g)	5 (mL)	1	Bulk (5030B)

Batch ID: 125027 **Method:** TEXAS TPH BY TX1005 **Prep:** TX 1005_S PR

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020223-01	1	12.51	10 (mL)	0.7994

Batch ID: 125106 **Method:** TCLP METALS BY SW6020A **Prep:** 3010A_TCLP

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020223-01	1	1	10 (mL)	10

Batch ID: 125107 **Method:** TCLP MERCURY BY SW7470A **Prep:** 1311_HGPR

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020223-01	1	10	10 (mL)	1

Batch ID: 125113 **Method:** LOW-LEVEL SEMIVOLATILES BY 8270D **Prep:** 3541_B_LOW

SampleID	Container	Sample Wt/Vol	Final Volume	Prep Factor
HS18020223-01	1	30.09	1 (mL)	0.03323

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID 125027	Test Name : TEXAS TPH BY TX1005		Matrix: Soil			
HS18020223-01	SO-1620-IDW-20180203	03 Feb 2018 10:00		06 Feb 2018 15:23	07 Feb 2018 17:42	1
Batch ID 125106	Test Name : TCLP METALS BY SW6020A		Matrix: Soil			
HS18020223-01	SO-1620-IDW-20180203	03 Feb 2018 10:00	08 Feb 2018 08:00	08 Feb 2018 11:43	08 Feb 2018 19:43	1
Batch ID 125107	Test Name : TCLP MERCURY BY SW7470A		Matrix: Soil			
HS18020223-01	SO-1620-IDW-20180203	03 Feb 2018 10:00	08 Feb 2018 08:00	08 Feb 2018 11:49	09 Feb 2018 10:55	1
Batch ID 125113	Test Name : LOW-LEVEL SEMIVOLATILES BY 8270D		Matrix: Soil			
HS18020223-01	SO-1620-IDW-20180203	03 Feb 2018 10:00		08 Feb 2018 12:30	15 Feb 2018 16:27	1
Batch ID R310285	Test Name : VOLATILES BY SW8260C		Matrix: Soil			
HS18020223-01	SO-1620-IDW-20180203	03 Feb 2018 10:00			07 Feb 2018 02:36	1

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125027	Instrument: FID-10	Method: TX1005								
MBLK	Sample ID: MBLK-125027	Units: mg/Kg	Analysis Date: 07-Feb-2018 05:37							
Client ID:	Run ID: FID-10_310336	SeqNo: 4423397	PrepDate: 06-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

nC6 to nC12	U	50								
>nC12 to nC28	U	50								
>nC28 to nC35	U	50								
Total Petroleum Hydrocarbon	U	50								
Surr: 2-Fluorobiphenyl	18.47	0	25	0	73.9	70 - 130				
Surr: Trifluoromethyl benzene	22.01	0	25	0	88.1	70 - 130				

LCS	Sample ID: LCS-125027	Units: mg/Kg	Analysis Date: 07-Feb-2018 06:06							
Client ID:	Run ID: FID-10_310336	SeqNo: 4423398	PrepDate: 06-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
nC6 to nC12	235.9	50	250	0	94.4	75 - 125				
>nC12 to nC28	241	50	250	0	96.4	75 - 125				
Surr: 2-Fluorobiphenyl	20.07	0	25	0	80.3	70 - 130				
Surr: Trifluoromethyl benzene	24.47	0	25	0	97.9	70 - 130				

LCSD	Sample ID: LCSD-125027	Units: mg/Kg	Analysis Date: 07-Feb-2018 06:36							
Client ID:	Run ID: FID-10_310336	SeqNo: 4423399	PrepDate: 06-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
nC6 to nC12	281	50	250	0	112	75 - 125	235.9	17.5	20	
>nC12 to nC28	275.5	50	250	0	110	75 - 125	241	13.4	20	
Surr: 2-Fluorobiphenyl	23.44	0	25	0	93.7	70 - 130	20.07	15.5	20	
Surr: Trifluoromethyl benzene	28.34	0	25	0	113	70 - 130	24.47	14.7	20	

MS	Sample ID: HS18020156-03MS	Units: mg/Kg	Analysis Date: 07-Feb-2018 08:31							
Client ID:	Run ID: FID-10_310336	SeqNo: 4423401	PrepDate: 06-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual
nC6 to nC12	217.7	43	216.3	0	101	75 - 125				
>nC12 to nC28	211.4	43	216.3	0	97.7	75 - 125				
Surr: 2-Fluorobiphenyl	18.39	0	21.63	0	85.0	70 - 130				
Surr: Trifluoromethyl benzene	22.09	0	21.63	0	102	70 - 130				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125027 **Instrument:** FID-10 **Method:** TX1005

MSD Sample ID: **HS18020156-03MSD** Units: **mg/Kg** Analysis Date: **07-Feb-2018 09:01**
 Client ID: Run ID: **FID-10_310336** SeqNo: **4423402** PrepDate: **06-Feb-2018** DF: **1**
 Analyte Result MQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

nC6 to nC12	202.1	40	200.6	0	101	75 - 125	217.7	7.44	20
>nC12 to nC28	194.6	40	200.6	0	97.0	75 - 125	211.4	8.26	20
<i>Surr: 2-Fluorobiphenyl</i>	<i>16.76</i>	<i>0</i>	<i>20.06</i>	<i>0</i>	<i>83.5</i>	<i>70 - 130</i>	<i>18.39</i>	<i>9.26</i>	<i>20</i>
<i>Surr: Trifluoromethyl benzene</i>	<i>20.47</i>	<i>0</i>	<i>20.06</i>	<i>0</i>	<i>102</i>	<i>70 - 130</i>	<i>22.09</i>	<i>7.59</i>	<i>20</i>

The following samples were analyzed in this batch: HS18020223-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125106	Instrument: ICPMS05	Method: SW1311/6020								
MBLK	Sample ID: MBLKT2-125106	Units: mg/L	Analysis Date: 08-Feb-2018 19:30							
Client ID:	Run ID: ICPMS05_310383	SeqNo: 4426551	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK	Sample ID: MBLKT1-125106	Units: mg/L	Analysis Date: 08-Feb-2018 19:28							
Client ID:	Run ID: ICPMS05_310383	SeqNo: 4426550	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Arsenic	U	0.0500								
Barium	U	0.200								
Cadmium	U	0.0500								
Chromium	U	0.0500								
Lead	U	0.0500								
Selenium	U	0.0500								
Silver	U	0.0500								

MBLK	Sample ID: MBLK-125106	Units: mg/L	Analysis Date: 08-Feb-2018 19:32							
Client ID:	Run ID: ICPMS05_310383	SeqNo: 4426552	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

Arsenic	U	0.00500								
Barium	U	0.0200								
Cadmium	U	0.00500								
Chromium	U	0.00500								
Lead	U	0.00500								
Selenium	U	0.00500								
Silver	U	0.00500								

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125106		Instrument: ICPMS05			Method: SW1311/6020					
LCS		Sample ID: LCS-125106			Units: mg/L		Analysis Date: 08-Feb-2018 19:34			
Client ID:		Run ID: ICPMS05_310383			SeqNo: 4426553		PrepDate: 08-Feb-2018		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04654	0.00500	0.05	0	93.1	80 - 120				
Barium	0.0422	0.0200	0.05	0	84.4	80 - 120				
Cadmium	0.04564	0.00500	0.05	0	91.3	80 - 120				
Chromium	0.04624	0.00500	0.05	0	92.5	80 - 120				
Lead	0.04715	0.00500	0.05	0	94.3	80 - 120				
Selenium	0.04802	0.00500	0.05	0	96.0	80 - 120				
Silver	0.04572	0.00500	0.05	0	91.4	80 - 120				
MS		Sample ID: HS18020362-01MS			Units: mg/L		Analysis Date: 08-Feb-2018 20:13			
Client ID:		Run ID: ICPMS05_310383			SeqNo: 4426567		PrepDate: 08-Feb-2018		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4687	0.0500	0.5	0.00117	93.5	80 - 120				
Barium	2.039	0.200	0.5	1.474	113	80 - 120				
Cadmium	0.476	0.0500	0.5	0.00138	94.9	80 - 120				
Chromium	0.4595	0.0500	0.5	-0.00084	92.1	80 - 120				
Lead	0.459	0.0500	0.5	0.002	91.4	80 - 120				
Selenium	0.4723	0.0500	0.5	-0.00217	94.9	80 - 120				
Silver	0.447	0.0500	0.5	0.00144	89.1	80 - 120				
MSD		Sample ID: HS18020362-01MSD			Units: mg/L		Analysis Date: 08-Feb-2018 20:15			
Client ID:		Run ID: ICPMS05_310383			SeqNo: 4426568		PrepDate: 08-Feb-2018		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.4867	0.0500	0.5	0.00117	97.1	80 - 120	0.4687	3.77	20	
Barium	2.004	0.200	0.5	1.474	106	80 - 120	2.039	1.76	20	
Cadmium	0.4628	0.0500	0.5	0.00138	92.3	80 - 120	0.476	2.81	20	
Chromium	0.4718	0.0500	0.5	-0.00084	94.5	80 - 120	0.4595	2.64	20	
Lead	0.4577	0.0500	0.5	0.002	91.1	80 - 120	0.459	0.281	20	
Selenium	0.5191	0.0500	0.5	-0.00217	104	80 - 120	0.4723	9.44	20	
Silver	0.4578	0.0500	0.5	0.00144	91.3	80 - 120	0.447	2.38	20	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125106 **Instrument:** ICPMS05 **Method:** SW1311/6020

PDS		Sample ID: HS18020362-01PDS			Units: mg/L		Analysis Date: 08-Feb-2018 20:17			
Client ID:		Run ID: ICPMS05_310383			SeqNo: 4426569		PrepDate: 08-Feb-2018		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	1.008	0.0500	1	0.00117	101	75 - 125				
Barium	2.593	0.200	1	1.474	112	75 - 125				
Cadmium	0.9716	0.0500	1	0.00138	97.0	75 - 125				
Chromium	0.9749	0.0500	1	-0.00084	97.6	75 - 125				
Lead	0.9277	0.0500	1	0.002	92.6	75 - 125				
Selenium	1.046	0.0500	1	-0.00217	105	75 - 125				
Silver	0.9232	0.0500	1	0.00144	92.2	75 - 125				

SD		Sample ID: HS18020362-01SD			Units: mg/L		Analysis Date: 08-Feb-2018 20:11			
Client ID:		Run ID: ICPMS05_310383			SeqNo: 4426566		PrepDate: 08-Feb-2018		DF: 5	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	U	0.250					0.00117	0	10	
Barium	1.602	1.00					1.474	8.67	10	
Cadmium	U	0.250					0.00138	0	10	
Chromium	U	0.250					-0.00084	0	10	
Lead	U	0.250					0.002	0	10	
Selenium	U	0.250					-0.00217	0	10	
Silver	U	0.250					0.00144	0	10	

The following samples were analyzed in this batch: HS18020223-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125107	Instrument: HG03	Method: SW7470
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MBLK	Sample ID: MBLK-125107	Units: mg/L	Analysis Date: 09-Feb-2018 10:42							
Client ID:	Run ID: HG03_310503	SeqNo: 4427376	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury U 0.000200

MBLK	Sample ID: GBLKT2-125107	Units: mg/L	Analysis Date: 09-Feb-2018 10:40							
Client ID:	Run ID: HG03_310503	SeqNo: 4427375	PrepDate: DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury U 0.000200

MBLK	Sample ID: GBLKT1-125107	Units: mg/L	Analysis Date: 09-Feb-2018 10:27							
Client ID:	Run ID: HG03_310503	SeqNo: 4427374	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury U 0.000200

LCS	Sample ID: LCS-125107	Units: mg/L	Analysis Date: 09-Feb-2018 10:43							
Client ID:	Run ID: HG03_310503	SeqNo: 4427377	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury 0.00537 0.000200 0.005 0 107 80 - 120

MS	Sample ID: HS18020362-01MS	Units: mg/L	Analysis Date: 09-Feb-2018 10:47							
Client ID:	Run ID: HG03_310503	SeqNo: 4427379	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury 0.00567 0.000200 0.005 -0.00003 114 75 - 125

MSD	Sample ID: HS18020362-01MSD	Units: mg/L	Analysis Date: 09-Feb-2018 10:49							
Client ID:	Run ID: HG03_310503	SeqNo: 4427380	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	RPD Qual

Mercury 0.00552 0.000200 0.005 -0.00003 111 75 - 125 0.00567 2.68 20

The following samples were analyzed in this batch: HS18020223-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MBLK	Sample ID: MBLK-125113	Units: ug/Kg			Analysis Date: 13-Feb-2018 12:14					
Client ID:	Run ID: SV-7_310699	SeqNo: 4431936	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	U	6.6								
2,4,5-Trichlorophenol	U	6.6								
2,4,6-Trichlorophenol	U	6.6								
2,4-Dichlorophenol	U	6.6								
2,4-Dimethylphenol	U	6.6								
2,4-Dinitrophenol	U	13								
2,4-Dinitrotoluene	U	6.6								
2,6-Dinitrotoluene	U	6.6								
2-Chloronaphthalene	U	6.6								
2-Chlorophenol	U	6.6								
2-Methylnaphthalene	U	3.3								
2-Methylphenol	U	6.6								
2-Nitroaniline	U	6.6								
2-Nitrophenol	U	6.6								
3&4-Methylphenol	U	6.6								
3,3'-Dichlorobenzidine	U	6.6								
3-Nitroaniline	U	6.6								
4,6-Dinitro-2-methylphenol	U	6.6								
4-Bromophenyl phenyl ether	U	6.6								
4-Chloro-3-methylphenol	U	6.6								
4-Chloroaniline	U	6.6								
4-Chlorophenyl phenyl ether	U	6.6								
4-Nitroaniline	U	6.6								
4-Nitrophenol	U	13								
Acenaphthene	U	3.3								
Acenaphthylene	U	3.3								
Anthracene	U	3.3								
Benz(a)anthracene	U	3.3								
Benzidine	U	6.6								
Benzo(a)pyrene	U	3.3								
Benzo(b)fluoranthene	U	3.3								
Benzo(g,h,i)perylene	U	3.3								
Benzo(k)fluoranthene	U	3.3								
Benzyl alcohol	U	6.6								

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MBLK	Sample ID: MBLK-125113	Units: ug/Kg			Analysis Date: 13-Feb-2018 12:14					
Client ID:	Run ID: SV-7_310699	SeqNo: 4431936	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-chloroethoxy)methane	U	6.6								
Bis(2-chloroethyl)ether	U	6.6								
Bis(2-chloroisopropyl)ether	U	6.6								
Bis(2-ethylhexyl)phthalate	U	6.6								
Butyl benzyl phthalate	U	6.6								
Carbazole	U	6.6								
Chrysene	U	3.3								
Dibenz(a,h)anthracene	U	3.3								
Dibenzofuran	U	3.3								
Diethyl phthalate	U	6.6								
Dimethyl phthalate	U	6.6								
Di-n-butyl phthalate	U	6.6								
Di-n-octyl phthalate	U	6.6								
Fluoranthene	U	3.3								
Fluorene	U	3.3								
Hexachlorobenzene	U	6.6								
Hexachlorobutadiene	U	6.6								
Hexachlorocyclopentadiene	U	6.6								
Hexachloroethane	U	6.6								
Indeno(1,2,3-cd)pyrene	U	3.3								
Isophorone	U	6.6								
Naphthalene	U	3.3								
Nitrobenzene	U	6.6								
N-Nitrosodimethylamine	U	6.6								
N-Nitrosodi-n-propylamine	U	6.6								
N-Nitrosodiphenylamine	U	6.6								
Pentachlorophenol	U	6.6								
Phenanthrene	U	3.3								
Phenol	U	6.6								
Pyrene	U	3.3								
Surr: 2,4,6-Tribromophenol	134.1	0	167	0	80.3	36 - 126				
Surr: 2-Fluorobiphenyl	123.9	0	167	0	74.2	43 - 125				
Surr: 2-Fluorophenol	118	0	167	0	70.7	37 - 125				
Surr: 4-Terphenyl-d14	136.3	0	167	0	81.6	32 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113 **Instrument:** SV-7 **Method:** SW8270

MBLK Sample ID: **MBLK-125113** Units: **ug/Kg** Analysis Date: **13-Feb-2018 12:14**
 Client ID: Run ID: **SV-7_310699** SeqNo: **4431936** PrepDate: **08-Feb-2018** DF: **1**
 Analyte Result MQL SPK Val SPK Ref Value %REC Control Limit RPD Ref Value %RPD RPD Limit Qual

<i>Surr: Nitrobenzene-d5</i>	114.8	0	167	0	68.8	37 - 125				
<i>Surr: Phenol-d6</i>	125.2	0	167	0	75.0	40 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
LCS	Sample ID: LCS-125113	Units: ug/Kg			Analysis Date: 13-Feb-2018 11:48					
Client ID:	Run ID: SV-7_310699	SeqNo: 4431935	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	146.4	6.6	167	0	87.7	50 - 120				
2,4,5-Trichlorophenol	157.6	6.6	167	0	94.4	45 - 127				
2,4,6-Trichlorophenol	142.2	6.6	167	0	85.1	45 - 130				
2,4-Dichlorophenol	153.5	6.6	167	0	91.9	45 - 125				
2,4-Dimethylphenol	132.4	6.6	167	0	79.3	45 - 120				
2,4-Dinitrophenol	142	13	167	0	85.0	10 - 126				
2,4-Dinitrotoluene	156.8	6.6	167	0	93.9	50 - 130				
2,6-Dinitrotoluene	149.1	6.6	167	0	89.3	50 - 125				
2-Chloronaphthalene	154.7	6.6	167	0	92.6	50 - 145				
2-Chlorophenol	168.1	6.6	167	0	101	45 - 120				
2-Methylnaphthalene	148.8	3.3	167	0	89.1	50 - 120				
2-Methylphenol	173.4	6.6	167	0	104	45 - 120				
2-Nitroaniline	175.3	6.6	167	0	105	45 - 138				
2-Nitrophenol	148.3	6.6	167	0	88.8	45 - 125				
3&4-Methylphenol	169.8	6.6	167	0	102	45 - 120				
3,3'-Dichlorobenzidine	119.9	6.6	167	0	71.8	15 - 120				
3-Nitroaniline	133.2	6.6	167	0	79.8	40 - 120				
4,6-Dinitro-2-methylphenol	168.7	6.6	167	0	101	15 - 135				
4-Bromophenyl phenyl ether	147.9	6.6	167	0	88.5	50 - 125				
4-Chloro-3-methylphenol	157.1	6.6	167	0	94.1	45 - 130				
4-Chloroaniline	134.6	6.6	167	0	80.6	20 - 120				
4-Chlorophenyl phenyl ether	150.3	6.6	167	0	90.0	50 - 120				
4-Nitroaniline	130.6	6.6	167	0	78.2	50 - 127				
4-Nitrophenol	158.1	13	167	0	94.7	40 - 147				
Acenaphthene	135.6	3.3	167	0	81.2	50 - 120				
Acenaphthylene	139	3.3	167	0	83.2	50 - 120				
Anthracene	151.8	3.3	167	0	90.9	50 - 123				
Benz(a)anthracene	154	3.3	167	0	92.2	50 - 131				
Benzdine	16.87	6.6	167	0	10.1	10 - 120				
Benzo(a)pyrene	175	3.3	167	0	105	50 - 130				
Benzo(b)fluoranthene	192	3.3	167	0	115	50 - 137				
Benzo(g,h,i)perylene	162.8	3.3	167	0	97.5	50 - 130				
Benzo(k)fluoranthene	183.3	3.3	167	0	110	50 - 143				
Benzyl alcohol	178.6	6.6	167	0	107	40 - 143				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
LCS	Sample ID: LCS-125113	Units: ug/Kg			Analysis Date: 13-Feb-2018 11:48					
Client ID:	Run ID: SV-7_310699	SeqNo: 4431935	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-chloroethoxy)methane	141.9	6.6	167	0	85.0	50 - 120				
Bis(2-chloroethyl)ether	182.4	6.6	167	0	109	45 - 127				
Bis(2-chloroisopropyl)ether	163.4	6.6	167	0	97.8	50 - 120				
Bis(2-ethylhexyl)phthalate	173.9	6.6	167	0	104	21 - 148				
Butyl benzyl phthalate	171.8	6.6	167	0	103	50 - 136				
Carbazole	131.7	6.6	167	0	78.8	50 - 143				
Chrysene	167.8	3.3	167	0	100	50 - 130				
Dibenz(a,h)anthracene	181.1	3.3	167	0	108	50 - 130				
Dibenzofuran	146.6	3.3	167	0	87.8	50 - 125				
Diethyl phthalate	150.8	6.6	167	0	90.3	50 - 125				
Dimethyl phthalate	148.9	6.6	167	0	89.2	50 - 125				
Di-n-butyl phthalate	157.1	6.6	167	0	94.0	50 - 140				
Di-n-octyl phthalate	195.7	6.6	167	0	117	50 - 140				
Fluoranthene	150.6	3.3	167	0	90.2	50 - 131				
Fluorene	147.5	3.3	167	0	88.3	50 - 125				
Hexachlorobenzene	152	6.6	167	0	91.0	50 - 124				
Hexachlorobutadiene	149.3	6.6	167	0	89.4	50 - 125				
Hexachlorocyclopentadiene	118.3	6.6	167	0	70.8	45 - 135				
Hexachloroethane	169.8	6.6	167	0	102	45 - 125				
Indeno(1,2,3-cd)pyrene	200.2	3.3	167	0	120	45 - 139				
Isophorone	140.8	6.6	167	0	84.3	45 - 130				
Naphthalene	144.7	3.3	167	0	86.7	50 - 125				
Nitrobenzene	140	6.6	167	0	83.8	50 - 125				
N-Nitrosodimethylamine	151.5	6.6	167	0	90.7	20 - 140				
N-Nitrosodi-n-propylamine	168.7	6.6	167	0	101	45 - 120				
N-Nitrosodiphenylamine	153.1	6.6	167	0	91.7	50 - 130				
Pentachlorophenol	165.1	6.6	167	0	98.8	23 - 136				
Phenanthrene	145.8	3.3	167	0	87.3	50 - 125				
Phenol	161.6	6.6	167	0	96.8	45 - 130				
Pyrene	159.2	3.3	167	0	95.3	45 - 130				
Surr: 2,4,6-Tribromophenol	163.9	0	167	0	98.2	36 - 126				
Surr: 2-Fluorobiphenyl	146.6	0	167	0	87.8	43 - 125				
Surr: 2-Fluorophenol	160.9	0	167	0	96.4	37 - 125				
Surr: 4-Terphenyl-d14	166.1	0	167	0	99.5	32 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
LCS	Sample ID: LCS-125113	Units: ug/Kg			Analysis Date: 13-Feb-2018 11:48					
Client ID:	Run ID: SV-7_310699	SeqNo: 4431935		PrepDate: 08-Feb-2018		DF: 1				
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual	
<i>Surr: Nitrobenzene-d5</i>	132.2	0	167	0	79.2	37 - 125				
<i>Surr: Phenol-d6</i>	170.6	0	167	0	102	40 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MS	Sample ID: HS18020229-14MS	Units: ug/Kg			Analysis Date: 14-Feb-2018 12:55					
Client ID:	Run ID: SV-7_310699	SeqNo: 4434310	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	241.6	13	333.1	0	72.5	50 - 120				
2,4,5-Trichlorophenol	273.5	13	333.1	0	82.1	45 - 127				
2,4,6-Trichlorophenol	268.5	13	333.1	0	80.6	45 - 130				
2,4-Dichlorophenol	244.1	13	333.1	0	73.3	45 - 125				
2,4-Dimethylphenol	250.6	13	333.1	0	75.2	45 - 120				
2,4-Dinitrophenol	159.4	26	333.1	0	47.9	10 - 126				
2,4-Dinitrotoluene	289.5	13	333.1	0	86.9	50 - 130				
2,6-Dinitrotoluene	270.7	13	333.1	0	81.3	50 - 125				
2-Chloronaphthalene	280.8	13	333.1	0	84.3	50 - 145				
2-Chlorophenol	266.1	13	333.1	0	79.9	45 - 120				
2-Methylnaphthalene	277.8	6.6	333.1	0	83.4	50 - 120				
2-Methylphenol	275.3	13	333.1	0	82.6	45 - 120				
2-Nitroaniline	425.5	13	333.1	0	128	45 - 138				
2-Nitrophenol	237.5	13	333.1	0	71.3	45 - 125				
3&4-Methylphenol	276.5	13	333.1	0	83.0	45 - 120				
3,3'-Dichlorobenzidine	427.5	13	333.1	0	128	15 - 120				S
3-Nitroaniline	289	13	333.1	0	86.8	40 - 120				
4,6-Dinitro-2-methylphenol	223.9	13	333.1	0	67.2	15 - 135				
4-Bromophenyl phenyl ether	265.2	13	333.1	0	79.6	50 - 125				
4-Chloro-3-methylphenol	263.3	13	333.1	0	79.0	45 - 130				
4-Chloroaniline	280.9	13	333.1	0	84.3	20 - 120				
4-Chlorophenyl phenyl ether	278.4	13	333.1	0	83.6	50 - 120				
4-Nitroaniline	300.7	13	333.1	0	90.3	50 - 127				
4-Nitrophenol	351.1	26	333.1	0	105	40 - 147				
Acenaphthene	664.2	6.6	333.1	0	199	50 - 120				S
Acenaphthylene	280.7	6.6	333.1	0	84.3	50 - 120				
Anthracene	428.8	6.6	333.1	0	129	50 - 123				S
Benz(a)anthracene	604.2	6.6	333.1	0	181	50 - 131				S
Benzidine	33.25	13	333.1	0	9.98	10 - 120				S
Benzo(a)pyrene	434.2	6.6	333.1	0	130	50 - 130				S
Benzo(b)fluoranthene	479.7	6.6	333.1	0	144	50 - 137				S
Benzo(g,h,i)perylene	342.8	6.6	333.1	0	103	50 - 130				
Benzo(k)fluoranthene	356.8	6.6	333.1	0	107	50 - 143				
Benzyl alcohol	284.5	13	333.1	0	85.4	40 - 143				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MS	Sample ID: HS18020229-14MS	Units: ug/Kg			Analysis Date: 14-Feb-2018 12:55					
Client ID:	Run ID: SV-7_310699	SeqNo: 4434310	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-chloroethoxy)methane	254	13	333.1	0	76.3	50 - 120				
Bis(2-chloroethyl)ether	305.7	13	333.1	0	91.8	45 - 127				
Bis(2-chloroisopropyl)ether	309.3	13	333.1	0	92.9	50 - 120				
Bis(2-ethylhexyl)phthalate	424.5	13	333.1	0	127	21 - 148				
Butyl benzyl phthalate	320.7	13	333.1	0	96.3	50 - 136				
Carbazole	336.4	13	333.1	0	101	50 - 143				
Chrysene	688.5	6.6	333.1	0	207	50 - 130				SE
Dibenz(a,h)anthracene	313.7	6.6	333.1	0	94.2	50 - 130				
Dibenzofuran	349.3	6.6	333.1	0	105	50 - 125				
Diethyl phthalate	298.8	13	333.1	0	89.7	50 - 125				
Dimethyl phthalate	278.8	13	333.1	0	83.7	50 - 125				
Di-n-butyl phthalate	302.8	13	333.1	0	90.9	50 - 140				
Di-n-octyl phthalate	345.3	13	333.1	0	104	50 - 140				
Fluoranthene	1729	6.6	333.1	0	519	50 - 131				SE
Fluorene	488.5	6.6	333.1	0	147	50 - 125				S
Hexachlorobenzene	309.3	13	333.1	0	92.8	50 - 124				
Hexachlorobutadiene	259.8	13	333.1	0	78.0	50 - 125				
Hexachlorocyclopentadiene	167.1	13	333.1	0	50.2	45 - 135				
Hexachloroethane	279	13	333.1	0	83.8	45 - 125				
Indeno(1,2,3-cd)pyrene	348	6.6	333.1	0	104	45 - 139				
Isophorone	262.3	13	333.1	0	78.7	45 - 130				
Naphthalene	282	6.6	333.1	0	84.7	50 - 125				
Nitrobenzene	274.9	13	333.1	0	82.5	50 - 125				
N-Nitrosodimethylamine	279.2	13	333.1	0	83.8	20 - 140				
N-Nitrosodi-n-propylamine	277.2	13	333.1	0	83.2	45 - 120				
N-Nitrosodiphenylamine	321.7	13	333.1	0	96.6	50 - 130				
Pentachlorophenol	223.3	13	333.1	0	67.0	23 - 136				
Phenanthrene	773.1	6.6	333.1	0	232	50 - 125				SE
Phenol	285.2	13	333.1	0	85.6	45 - 130				
Pyrene	1218	6.6	333.1	0	366	45 - 130				SE
Surr: 2,4,6-Tribromophenol	273.8	0	333.1	0	82.2	36 - 126				
Surr: 2-Fluorobiphenyl	272	0	333.1	0	81.7	43 - 125				
Surr: 2-Fluorophenol	232.3	0	333.1	0	69.7	37 - 125				
Surr: 4-Terphenyl-d14	285.6	0	333.1	0	85.7	32 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113	Instrument: SV-7	Method: SW8270								
MS	Sample ID: HS18020229-14MS	Units: ug/Kg	Analysis Date: 14-Feb-2018 12:55							
Client ID:	Run ID: SV-7_310699	SeqNo: 4434310	PrepDate: 08-Feb-2018 DF: 1							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

<i>Surr: Nitrobenzene-d5</i>	280.5	0	333.1	0	84.2	37 - 125				
<i>Surr: Phenol-d6</i>	281.8	0	333.1	0	84.6	40 - 125				

MS	Sample ID: HS18020320-04MS	Units: ug/Kg	Analysis Date: 14-Feb-2018 21:53							
Client ID:	Run ID: SV-7_310699	SeqNo: 4436190	PrepDate: 08-Feb-2018 DF: 10							
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	RPD %RPD	RPD Limit	Qual

2-Methylnaphthalene	27460	66	332.2	21490	1800	50 - 120				SEO
Acenaphthene	32830	66	332.2	25240	2280	50 - 120				SEO
Acenaphthylene	723.8	66	332.2	425.7	89.7	50 - 120				
Anthracene	14170	66	332.2	10340	1150	50 - 123				SEO
Benz(a)anthracene	6494	66	332.2	4977	457	50 - 131				SO
Benzo(a)pyrene	2340	66	332.2	1472	261	50 - 130				SO
Benzo(b)fluoranthene	3390	66	332.2	2498	269	50 - 137				SO
Benzo(g,h,i)perylene	766.3	66	332.2	416.1	105	50 - 130				
Benzo(k)fluoranthene	1258	66	332.2	932.9	97.9	50 - 143				
Chrysene	5976	66	332.2	4510	441	50 - 130				SO
Dibenz(a,h)anthracene	483.6	66	332.2	115	111	50 - 130				
Dibenzofuran	25870	66	332.2	19480	1920	50 - 125				SEO
Fluoranthene	38160	66	332.2	29700	2550	50 - 131				SEO
Fluorene	30970	66	332.2	23380	2280	50 - 125				SEO
Indeno(1,2,3-cd)pyrene	1045	66	332.2	470.7	173	45 - 139				S
Naphthalene	39170	66	332.2	32960	1870	50 - 125				SEO
Phenanthrene	56530	66	332.2	47000	2870	50 - 125				SEO
Pyrene	27880	66	332.2	21940	1790	45 - 130				SEO
<i>Surr: 2,4,6-Tribromophenol</i>	231.1	0	332.2	0	69.6	36 - 126				
<i>Surr: 2-Fluorobiphenyl</i>	220.4	0	332.2	0	66.3	43 - 125				
<i>Surr: 2-Fluorophenol</i>	159.9	0	332.2	0	48.1	37 - 125				
<i>Surr: 4-Terphenyl-d14</i>	325.4	0	332.2	0	97.9	32 - 125				
<i>Surr: Nitrobenzene-d5</i>	285.8	0	332.2	0	86.0	37 - 125				
<i>Surr: Phenol-d6</i>	266.3	0	332.2	0	80.2	40 - 125				

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MSD	Sample ID: HS18020229-14MSD	Units: ug/Kg			Analysis Date: 13-Feb-2018 20:53					
Client ID:	Run ID: SV-7_310699	SeqNo: 4434327	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,2,4-Trichlorobenzene	262	13	333.3	0	78.6	50 - 120	241.6	8.12	30	
2,4,5-Trichlorophenol	280.8	13	333.3	0	84.2	45 - 127	273.5	2.62	30	
2,4,6-Trichlorophenol	236.6	13	333.3	0	71.0	45 - 130	268.5	12.6	30	
2,4-Dichlorophenol	266.1	13	333.3	0	79.8	45 - 125	244.1	8.61	30	
2,4-Dimethylphenol	248.3	13	333.3	0	74.5	45 - 120	250.6	0.92	30	
2,4-Dinitrophenol	136.2	26	333.3	0	40.9	10 - 126	159.4	15.7	30	
2,4-Dinitrotoluene	281.2	13	333.3	0	84.4	50 - 130	289.5	2.91	30	
2,6-Dinitrotoluene	287.7	13	333.3	0	86.3	50 - 125	270.7	6.1	30	
2-Chloronaphthalene	251.5	13	333.3	0	75.4	50 - 145	280.8	11	30	
2-Chlorophenol	263.9	13	333.3	0	79.2	45 - 120	266.1	0.824	30	
2-Methylnaphthalene	292.7	6.6	333.3	265.7	8.09	50 - 120	277.8	5.2	30	S
2-Methylphenol	269.2	13	333.3	0	80.8	45 - 120	275.3	2.22	30	
2-Nitroaniline	414.4	13	333.3	0	124	45 - 138	425.5	2.64	30	
2-Nitrophenol	230.1	13	333.3	0	69.0	45 - 125	237.5	3.16	30	
3&4-Methylphenol	277.8	13	333.3	0	83.3	45 - 120	276.5	0.455	30	
3,3'-Dichlorobenzidine	426.7	13	333.3	0	128	15 - 120	427.5	0.193	30	S
3-Nitroaniline	363.5	13	333.3	0	109	40 - 120	289	22.8	30	
4,6-Dinitro-2-methylphenol	231.2	13	333.3	0	69.4	15 - 135	223.9	3.19	30	
4-Bromophenyl phenyl ether	264.7	13	333.3	0	79.4	50 - 125	265.2	0.187	30	
4-Chloro-3-methylphenol	298.5	13	333.3	0	89.5	45 - 130	263.3	12.5	30	
4-Chloroaniline	309	13	333.3	0	92.7	20 - 120	280.9	9.54	30	
4-Chlorophenyl phenyl ether	279.3	13	333.3	0	83.8	50 - 120	278.4	0.355	30	
4-Nitroaniline	307.7	13	333.3	0	92.3	50 - 127	300.7	2.31	30	
4-Nitrophenol	340.3	26	333.3	0	102	40 - 147	351.1	3.12	30	
Acenaphthene	660.2	6.6	333.3	747.3	-26.1	50 - 120	664.2	0.599	30	S
Acenaphthylene	276.7	6.6	333.3	15.04	78.5	50 - 120	280.7	1.44	30	
Anthracene	424.7	6.6	333.3	290	40.4	50 - 123	428.8	0.952	30	S
Benz(a)anthracene	631.8	6.6	333.3	390.8	72.3	50 - 131	604.2	4.48	30	
Benzidine	47.28	13	333.3	0	14.2	10 - 120	33.25	34.8	30	R
Benzo(a)pyrene	477.7	6.6	333.3	135.1	103	50 - 130	434.2	9.55	30	
Benzo(b)fluoranthene	546.9	6.6	333.3	201	104	50 - 137	479.7	13.1	30	
Benzo(g,h,i)perylene	356.7	6.6	333.3	44.24	93.7	50 - 130	342.8	3.96	30	
Benzo(k)fluoranthene	397.9	6.6	333.3	78.46	95.8	50 - 143	356.8	10.9	30	
Benzyl alcohol	253.7	13	333.3	0	76.1	40 - 143	284.5	11.5	30	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113		Instrument: SV-7		Method: SW8270						
MSD	Sample ID: HS18020229-14MSD	Units: ug/Kg			Analysis Date: 13-Feb-2018 20:53					
Client ID:	Run ID: SV-7_310699	SeqNo: 4434327	PrepDate: 08-Feb-2018	DF: 1						
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Bis(2-chloroethoxy)methane	258.7	13	333.3	0	77.6	50 - 120	254	1.82	30	
Bis(2-chloroethyl)ether	315.1	13	333.3	0	94.5	45 - 127	305.7	3.03	30	
Bis(2-chloroisopropyl)ether	316.6	13	333.3	0	95.0	50 - 120	309.3	2.32	30	
Bis(2-ethylhexyl)phthalate	432	13	333.3	101.5	99.2	21 - 148	424.5	1.75	30	
Butyl benzyl phthalate	323.9	13	333.3	15.36	92.6	50 - 136	320.7	0.991	30	
Carbazole	315.7	13	333.3	40.53	82.6	50 - 143	336.4	6.35	30	
Chrysene	682.5	6.6	333.3	447.5	70.5	50 - 130	688.5	0.874	30	E
Dibenz(a,h)anthracene	352.4	6.6	333.3	15.58	101	50 - 130	313.7	11.6	30	
Dibenzofuran	347.4	6.6	333.3	307.4	12.0	50 - 125	349.3	0.544	30	S
Diethyl phthalate	298.6	13	333.3	0	89.6	50 - 125	298.8	0.0419	30	
Dimethyl phthalate	281.2	13	333.3	0	84.4	50 - 125	278.8	0.844	30	
Di-n-butyl phthalate	314.6	13	333.3	0	94.4	50 - 140	302.8	3.8	30	
Di-n-octyl phthalate	381.9	13	333.3	0	115	50 - 140	345.3	10.1	30	
Fluoranthene	1771	6.6	333.3	1910	-41.7	50 - 131	1729	2.36	30	SEO
Fluorene	485	6.6	333.3	474.6	3.14	50 - 125	488.5	0.709	30	S
Hexachlorobenzene	311.8	13	333.3	0	93.5	50 - 124	309.3	0.799	30	
Hexachlorobutadiene	272.5	13	333.3	0	81.7	50 - 125	259.8	4.77	30	
Hexachlorocyclopentadiene	157.6	13	333.3	0	47.3	45 - 135	167.1	5.85	30	
Hexachloroethane	289.6	13	333.3	0	86.9	45 - 125	279	3.72	30	
Indeno(1,2,3-cd)pyrene	375.7	6.6	333.3	56.34	95.8	45 - 139	348	7.68	30	
Isophorone	272.7	13	333.3	0	81.8	45 - 130	262.3	3.91	30	
Naphthalene	295	6.6	333.3	540.5	-73.7	50 - 125	282	4.47	30	S
Nitrobenzene	297.5	13	333.3	0	89.2	50 - 125	274.9	7.9	30	
N-Nitrosodimethylamine	320.2	13	333.3	0	96.0	20 - 140	279.2	13.7	30	
N-Nitrosodi-n-propylamine	271	13	333.3	0	81.3	45 - 120	277.2	2.28	30	
N-Nitrosodiphenylamine	300	13	333.3	0	90.0	50 - 130	321.7	6.97	30	
Pentachlorophenol	211.1	13	333.3	0	63.3	23 - 136	223.3	5.6	30	
Phenanthrene	790.2	6.6	333.3	1402	-184	50 - 125	773.1	2.19	30	SEO
Phenol	266.7	13	333.3	0	80.0	45 - 130	285.2	6.69	30	
Pyrene	1205	6.6	333.3	1251	-13.8	45 - 130	1218	1.09	30	SE
Surr: 2,4,6-Tribromophenol	260.4	0	333.3	0	78.1	36 - 126	273.8	5.03	30	
Surr: 2-Fluorobiphenyl	261	0	333.3	0	78.3	43 - 125	272	4.12	30	
Surr: 2-Fluorophenol	241.5	0	333.3	0	72.5	37 - 125	232.3	3.88	30	
Surr: 4-Terphenyl-d14	288.1	0	333.3	0	86.4	32 - 125	285.6	0.887	30	

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: 125113 **Instrument:** SV-7 **Method:** SW8270

MSD		Sample ID: HS18020229-14MSD			Units: ug/Kg		Analysis Date: 13-Feb-2018 20:53			
Client ID:		Run ID: SV-7_310699			SeqNo: 4434327		PrepDate: 08-Feb-2018		DF: 1	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Surr: Nitrobenzene-d5	290	0	333.3	0	87.0	37 - 125	280.5	3.33	30	
Surr: Phenol-d6	287.2	0	333.3	0	86.1	40 - 125	281.8	1.88	30	

MSD		Sample ID: HS18020320-04MSD			Units: ug/Kg		Analysis Date: 14-Feb-2018 22:12			
Client ID:		Run ID: SV-7_310699			SeqNo: 4436191		PrepDate: 08-Feb-2018		DF: 10	
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	22680	66	332	21490	360	50 - 120	27460	19.1	30	SEO
Acenaphthene	26690	66	332	25240	438	50 - 120	32830	20.6	30	SEO
Acenaphthylene	654	66	332	425.7	68.7	50 - 120	723.8	10.1	30	
Anthracene	10980	66	332	10340	193	50 - 123	14170	25.4	30	SEO
Benz(a)anthracene	5617	66	332	4977	193	50 - 131	6494	14.5	30	SO
Benzo(a)pyrene	1917	66	332	1472	134	50 - 130	2340	19.9	30	SO
Benzo(b)fluoranthene	2705	66	332	2498	62.5	50 - 137	3390	22.5	30	O
Benzo(g,h,i)perylene	693.7	66	332	416.1	83.6	50 - 130	766.3	9.95	30	
Benzo(k)fluoranthene	1230	66	332	932.9	89.4	50 - 143	1258	2.29	30	
Chrysene	5105	66	332	4510	179	50 - 130	5976	15.7	30	SO
Dibenz(a,h)anthracene	476.7	66	332	115	109	50 - 130	483.6	1.44	30	
Dibenzofuran	21410	66	332	19480	581	50 - 125	25870	18.9	30	SEO
Fluoranthene	27950	66	332	29700	-529	50 - 131	38160	30.9	30	SREO
Fluorene	24850	66	332	23380	441	50 - 125	30970	21.9	30	SEO
Indeno(1,2,3-cd)pyrene	885.2	66	332	470.7	125	45 - 139	1045	16.5	30	
Naphthalene	27890	66	332	32960	-1530	50 - 125	39170	33.7	30	SREO
Phenanthrene	44740	66	332	47000	-683	50 - 125	56530	23.3	30	SEO
Pyrene	21230	66	332	21940	-212	45 - 130	27880	27.1	30	SEO
Surr: 2,4,6-Tribromophenol	232.2	0	332	0	69.9	36 - 126	231.1	0.475	30	
Surr: 2-Fluorobiphenyl	251.6	0	332	0	75.8	43 - 125	220.4	13.2	30	
Surr: 2-Fluorophenol	215.9	0	332	0	65.0	37 - 125	159.9	29.8	30	
Surr: 4-Terphenyl-d14	299.4	0	332	0	90.2	32 - 125	325.4	8.3	30	
Surr: Nitrobenzene-d5	278.9	0	332	0	84.0	37 - 125	285.8	2.42	30	
Surr: Phenol-d6	252.3	0	332	0	76.0	40 - 125	266.3	5.4	30	

The following samples were analyzed in this batch: HS18020223-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: R310285		Instrument: VOA5		Method: SW8260					
MBLK	Sample ID: VBLKS2-020618	Units: ug/Kg			Analysis Date: 06-Feb-2018 22:44				
Client ID:	Run ID: VOA5_310285	SeqNo: 4423246		PrepDate:			DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Benzene	U	5.0							
Ethylbenzene	U	5.0							
m,p-Xylene	U	10							
o-Xylene	U	5.0							
Toluene	U	5.0							
Xylenes, Total	U	5.0							
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>51.27</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>76 - 125</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>51.64</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>83 - 120</i>			
<i>Surr: Dibromofluoromethane</i>	<i>52.94</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>106</i>	<i>80 - 119</i>			
<i>Surr: Toluene-d8</i>	<i>51.5</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>103</i>	<i>81 - 118</i>			

LCS	Sample ID: VLCSS2-020618	Units: ug/Kg			Analysis Date: 06-Feb-2018 21:57				
Client ID:	Run ID: VOA5_310285	SeqNo: 4423245		PrepDate:			DF: 1		
Analyte	Result	MQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit Qual

Benzene	47.2	5.0	50	0	94.4	75 - 124			
Ethylbenzene	41.57	5.0	50	0	83.1	70 - 123			
m,p-Xylene	86.56	10	100	0	86.6	77 - 125			
o-Xylene	42.55	5.0	50	0	85.1	78 - 122			
Toluene	42.79	5.0	50	0	85.6	76 - 122			
Xylenes, Total	129.1	5.0	150	0	86.1	77 - 128			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>52.3</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>105</i>	<i>76 - 125</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>49.19</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.4</i>	<i>83 - 120</i>			
<i>Surr: Dibromofluoromethane</i>	<i>50.06</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>100</i>	<i>80 - 119</i>			
<i>Surr: Toluene-d8</i>	<i>49.45</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>98.9</i>	<i>81 - 118</i>			

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

QC BATCH REPORT

Batch ID: R310285		Instrument: VOA5		Method: SW8260						
MS	Sample ID: HS18020276-01MS	Units: ug/Kg			Analysis Date: 07-Feb-2018 02:59					
Client ID:	Run ID: VOA5_310285	SeqNo: 4423257		PrepDate:			DF: 1			
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	43.45	4.9	49	0	88.7	70 - 130				
Ethylbenzene	34.02	4.9	49	0	69.4	70 - 130				S
m,p-Xylene	68.61	9.8	98	0	70.0	70 - 130				
o-Xylene	36.16	4.9	49	0	73.8	70 - 130				
Toluene	37.06	4.9	49	0	75.6	70 - 130				
Xylenes, Total	104.8	4.9	147	0	71.3	70 - 130				
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.54</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>101</i>	<i>70 - 126</i>				
<i>Surr: 4-Bromofluorobenzene</i>	<i>46.09</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>94.1</i>	<i>72 - 120</i>				
<i>Surr: Dibromofluoromethane</i>	<i>48</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>98.0</i>	<i>70 - 130</i>				
<i>Surr: Toluene-d8</i>	<i>46.69</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>95.3</i>	<i>82 - 121</i>				

MSD	Sample ID: HS18020276-01MSD	Units: ug/Kg			Analysis Date: 07-Feb-2018 03:22					
Client ID:	Run ID: VOA5_310285	SeqNo: 4423258		PrepDate:			DF: 1			
Analyte	Result	MLQ	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	43.72	4.9	49	0	89.2	70 - 130	43.45	0.602	30	
Ethylbenzene	35.1	4.9	49	0	71.6	70 - 130	34.02	3.12	30	
m,p-Xylene	74.56	9.8	98	0	76.1	70 - 130	68.61	8.31	30	
o-Xylene	38.63	4.9	49	0	78.8	70 - 130	36.16	6.61	30	
Toluene	39.1	4.9	49	0	79.8	70 - 130	37.06	5.35	30	
Xylenes, Total	113.2	4.9	147	0	77.0	70 - 130	104.8	7.72	30	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>49.22</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>100</i>	<i>70 - 126</i>	<i>49.54</i>	<i>0.641</i>	<i>30</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>46.87</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>95.7</i>	<i>72 - 120</i>	<i>46.09</i>	<i>1.68</i>	<i>30</i>	
<i>Surr: Dibromofluoromethane</i>	<i>48.8</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>99.6</i>	<i>70 - 130</i>	<i>48</i>	<i>1.64</i>	<i>30</i>	
<i>Surr: Toluene-d8</i>	<i>48.72</i>	<i>0</i>	<i>49</i>	<i>0</i>	<i>99.4</i>	<i>82 - 121</i>	<i>46.69</i>	<i>4.26</i>	<i>30</i>	

The following samples were analyzed in this batch: HS18020223-01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Pastor, Behling & Wheeler, LLC
Project: Houston TX-Wood Preserving Works
WorkOrder: HS18020223

**QUALIFIERS,
ACRONYMS, UNITS**

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
Date	
mg/Kg-dry	Milligrams per Kilogram- Dry weight corrected
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	17-027-0	27-Mar-2018
California	2919 2016-2018	31-Jul-2018
Illinois	004112	09-May-2018
Kentucky	123043	30-Apr-2018
Louisiana	03087 2017-2017	30-Jun-2018
North Dakota	R193 2017-2017	30-Apr-2018
Oklahoma	2017-088	31-Aug-2018
Texas	T104704231-17-19	30-Apr-2018
North Carolina	624-2018	31-Dec-2018

Sample Receipt Checklist

Client Name: PBW
Work Order: HS18020223

Date/Time Received: 05-Feb-2018 07:33
Received by: PS

Checklist completed by: Jared R. Makan (eSignature) 5-Feb-2018 (Date)
Reviewed by: Dane J. Wacasey (eSignature) 7-Feb-2018 (Date)

Matrices: Soil Carrier name: ALS Courier

- Shipping container/cooler in good condition? Yes [checked] No [] Not Present []
Custody seals intact on shipping container/cooler? Yes [] No [] Not Present [checked]
Custody seals intact on sample bottles? Yes [] No [] Not Present [checked]
Chain of custody present? Yes [checked] No []
Chain of custody signed when relinquished and received? Yes [checked] No []
Chain of custody agrees with sample labels? Yes [checked] No []
Samples in proper container/bottle? Yes [checked] No []
Sample containers intact? Yes [checked] No []
TX1005 solids received in hermetically sealed vials? Yes [checked] No [] N/A []
Sufficient sample volume for indicated test? Yes [checked] No []
All samples received within holding time? Yes [checked] No []
Container/Temp Blank temperature in compliance? Yes [checked] No []

Temperature(s)/Thermometer(s): 1.1c/0.6c UC/C IR11
Cooler(s)/Kit(s): 5434
Date/Time sample(s) sent to storage: 02/05/2018 08:01
Water - VOA vials have zero headspace? Yes [] No [] No VOA vials submitted [checked]
Water - pH acceptable upon receipt? Yes [] No [] N/A [checked]
pH adjusted? Yes [] No [] N/A [checked]
pH adjusted by:

Login Notes: Samples placed in freezer prior to login.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments: []

Corrective Action: []



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Fort Collins, CO
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Chain of Custody Form

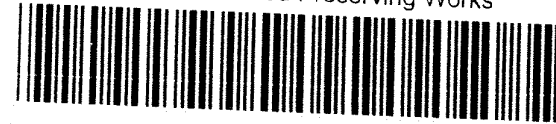
Page 1 of 1

COC ID: **172564**

ALS Project Manager:

HS18020223

Pastor, Behling & Wheeler, LLC
Houston TX-Wood Preserving Works



n, WV

Customer Information		Project Information	
Purchase Order	UPRR / Kevin Peterbu	Project Name	Houston TX-Wood Preserving Wor
Work Order		Project Number	(IDW) 1620-06-Rev0 92688
Company Name	Pastor, Behling & Wheeler, LLC	Bill To Company	Union Pacific Railroad- A/P
Send Report To	Eric Matzner	Invoice Attn	Accounts Payable
Address	2201 Double Creek Drive	Address	1400 Douglas Street
	Suite 4004		Stop 0750
City/State/Zip	Round Rock, TX 78664	City/State/Zip	Omaha NE 681790750
Phone	(512) 671-3434	Phone	
Fax	(512) 671-3446	Fax	
e-Mail Address	eric.matzner@pbwllc.com	e-Mail Address	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	SO-1620-IDW01-20180203	2/3/18	1000	Soil	Ice (8)	4	X	X	X	X							
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:		
Chris Kakolewski		Personally Delivered		<input checked="" type="checkbox"/> STD 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour						
Relinquished by: <i>Chris Kakolewski</i>		Date: 2/3/18	Time: 1700	Received by:		Notes: UPRR Houston MWPW				
Relinquished by: <i>Eric Matzner</i>		Date: 2-5-18	Time: 7:20	Received by (Laboratory): <i>[Signature]</i>		Cooler ID: 5434	Cooler Temp: 1,1	QC Package: (Check One Box Below)		
Logged by (Laboratory): <i>[Signature]</i>		Date: 2-5-18	Time: 0733	Checked by (Laboratory): <i>[Signature]</i>		<input checked="" type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Date <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other				
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₈ 6-NaHSO ₄ 7-Other 8-4°C 9-5035										

ote: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

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