Annual Water Quality Monitoring Report
Marsh Lumber - VCC Number 16-5858-RP
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

PREPARED FOR:

South Carolina Department of Health & Environmental Control
2600 Bull Street
Columbia, South Carolina 29301-1708

PREPARED BY:

S&ME, Inc.
8646 West Market Street, Suite 105
Greensboro, North Carolina 27409

April 9, 2019

April 9, 2019

South Carolina Department of Health & Environmental Control
2600 Bull Street
Columbia, South Carolina 29301-1708

Attention: Ms. Kim Kuhn

Reference: **Annual Water Quality Monitoring Report**
Marsh Lumber - VCC Number 16-5858-RP
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Dear Ms. Kuhn:

S&ME, Inc. (S&ME) has prepared this report for the Marsh Lumber site, VCC number 16-5858-RP. This report documents the 2019 annual water quality monitoring analytical results and our associated findings.

S&ME appreciates your regulatory program oversight of this project. Please review this report and if you have questions or if you need additional information, please contact Edmund Henriques at 336-288-7180.

Sincerely,

S&ME, Inc.

Edmund Q.B. Henriques
Senior Project Manager

John Whitehead, P.G.
Senior Geologist

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1.0 Background

The subject property is located at 119 Sixth Avenue in Pamplico, Florence County, South Carolina. The subject site includes approximately 15 acres of an approximate 28 acre parcel identified by the County of Florence as Tax Map Series Number 60005-01-003. The current owner is listed as Marsh Furniture Company, Inc. (MARSH). The subject site is zoned industrial and occupied by MARSH operations. The site location is shown on **Figure 1**.

Multiple environmental assessments have been completed on the subject site over the past 26 years. Historically, pentachlorophenol (PCP) was used on-site at the former saw mill, in the area of the former Green Chain conveyor. Soil assessments conducted in the former Green Chain area concluded that no additional assessment of this potential PCP secondary source area was required. Furthermore, prior assessments concluded that TAL metals were not constituents of concern for this incident. The majority of the assessments conducted related to assessment of PCP dissolved in groundwater beneath a portion of the site. Site assessment work completed to date defined the horizontal extent of the dissolved phase plume and monitoring is conducted to assess plume migration and stability. The PCP incident is the focus of the Voluntary Cleanup Contract (i.e. VCC 16-5858-RP).

In addition to assessing site conditions, MARSH has conducted pilot testing of remedial alternatives. In 2009, MARSH initiated a long-term bio-sparge pilot test in the region up-gradient of monitoring well MW-3A. Analytical results for groundwater samples obtained from monitoring well MW-3A provided evidence for long-term reductions in the dissolved PCP concentrations at monitoring well MW-3A. Recognizing the success of the first long-term bio-sparge pilot test, the VCC Work Plans included a second bio-sparge pilot test in the area up-gradient of monitoring well MW-14A. The 2nd Bio-Sparge Pilot test was initiated in the vicinity of monitoring well MW-14A, situated in the area of the greatest PCP plume groundwater concentrations. The pilot test has focused on monitoring for evidence of bio-degradation of dissolved phase PCP and changes in PCP concentrations. Based on the data collected we infer that bio-sparging has reduced the concentrations of PCP at monitoring well MW-14A.

In 2017, additional assessment was performed to refine the horizontal extent of the dissolved phase PCP plume in the vicinity of monitoring well MW-14A. The additional assessment improved the understanding the PCP distributions in the pilot test study area, which in turn guided the selection of locations for five additional bio-sparge injection wells for pilot testing. Based on the Work Plan approved by SCDHEC, the pilot test program was expanded to include five additional bio-sparge wells to enhance the area of groundwater treatment, manage dissolved phase PCP within the test area, and monitoring for PCP concentration changes. The expansion of the bio-sparge system commenced the week of April 16, 2018, with the installation of five new sparge wells and appurtenant equipment and fixtures. On May 25, 2018, operation of the expanded bio-sparge pilot test wells system commenced. The pilot test data being collected will be utilized in the ensuing analysis of remedial alternatives for the PCP incident. The last groundwater monitoring report was S&ME's, *Semi-Annual Water Quality Monitoring Report*, dated October 30, 2018.

This report documents the sampling and analyses conducted for the 2019 annual water quality monitoring event as well as monitoring conducted as part of the bio-sparge pilot test.

2.0 Methods Employed

2.1 Groundwater Elevation Monitoring

On February 18, 2019, depth to groundwater data was collected from the wells MW-3A, MW-10, MW-13A, MW-14A, MW-15, MW-16, MW-18B, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, and MW-30. The bio-sparge system was shut down approximately two days before this monitoring event. Groundwater levels were measured utilizing an electric water level indicator. The probe of the water level indicator was lowered into the well until the probe contacted the water surface as indicated by a solid tone or illumination of a light. The depth to groundwater was measured from the established top of casing elevation and was recorded to the nearest 0.01-foot. The depth to groundwater data was subtracted from the top of casing elevation to provide a relative groundwater elevation for each well gauged. The groundwater elevation data was utilized to evaluate the estimated direction of groundwater flow discussed in Section 3.1.

2.2 Water Quality Monitoring

2.2.1 Groundwater Sampling

Groundwater samples were obtained from monitoring wells MW-3A, MW-10, MW-13A, MW-14A, MW-15, MW-16, MW-18B, MW-19, MW-20, MW-21, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, and MW-30 between February 18, 2019 and February 21, 2019. Groundwater samples were collected using a peristaltic pump with silicone and polyethylene tubing. The polyethylene tubing was lowered to the lowermost portion of well screen interval, consistent with prior sampling events. Each well was purged using low flow rates and monitored for pH, temperature, conductivity, dissolved oxygen (DO), oxidation reduction potential (ORP) and turbidity, using a flow-through cell and YSI Pro (or equivalent) meter. At a minimum, the time interval between measurements was the time required for one complete exchange of the volume of water in the flow-through cell. Sample collection generally commenced when the changes in those readings fluctuated within ±10% or less. For turbidity, a target value of less than or equal to 10 Nephelometric Turbidity Units (NTU) was used as a guide for sample collection. Professional judgement was utilized in certain cases to collect a sample when the target NTU value was not achieved but other field parameter readings were stable. **Table 1** provides a summary of well construction details. **Table 2** provides a summary of field parameter data collected for this monitoring event. Groundwater Sampling Field Forms are provided in **Appendix I**.

Groundwater samples obtained from the monitoring wells sampled were submitted for analysis for Target Compound List (TCL) semi-volatile organic compounds (SVOCs) by Method 8270. Groundwater samples obtained from MW-13A, MW-14A, MW-21, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, and MW-30 were also submitted for analysis for Alkalinity by SM 2320B, Chloride by SM4500-CL-E, and Total Organic Carbon (TOC) by SM 5310B.

S&ME understands that US Environmental Protection Agency (EPA) Method 8270 cannot achieve the Maximum Contaminant Level (MCL) of 1 µg/L. Research of alternate analytical methods previously indicated that EPA Method 8151 may achieve a reporting limit of 1 µg/L or less for PCP; however, this analytical test method does not report other potential PCP breakdown compounds. In light of the projects current monitoring goals, Method

8270 was considered appropriate for the detection of PCP and potential PCP breakdown compounds; therefore, it was specified in each approved Work Plan. Changing from analytical Method 8270 to Method 8151 in the middle of this pilot test would introduce an extraneous variable into the pilot test study.

Recognizing that at the end of pilot test and prior to selection of the final remedy, the assessment must delineate the extent of the 1 µg/L PCP plume; a select number of monitoring wells, mostly along the horizontal limits of the PCP plume were chosen for the collection of additional samples for analysis of PCP by Method 8151. Groundwater samples obtained from the monitoring wells MW-14A, MW-15, MW-18B, MW-19, MW-22, MW-23, MW-24, MW-27, and MW-30 were submitted for analysis for PCP by Method 8151 in addition to Method 8270.

Appendix II contains copies of the laboratory analytical reports.

2.2.2 Surface Water Sampling

On February 18, 2019, surface water samples SW-1, SW-2, SW-3 and SW-4, were collected from the tributary of the Big Swamp that is located along the southern and western portions of the site. A segment of the tributary flows open channel down-gradient of the PCP contaminant plume. The stream also flows within a storm drain conduit that follows the perimeter of a portion of the site. The tributary's open channel located west of wells MW-15, MW-18A and MW-18B represents an area of expected groundwater discharge for the water table aquifer.

The surface water sample locations are indicated on **Figure 2**. Surface water sample SW-1 was collected from the piped stream before it flows into a region down-gradient of the PCP groundwater plume. Surface water samples SW-2, SW-3 and SW-4 represent samples collected after the stream flows around the perimeter of site. Sample location SW-2 is down-gradient of the PCP groundwater plume. Sample location SW-3 is approximately 200 feet down stream of location SW-2. Sample location SW-4 represents surface water quality at the point water leaves the piped stream segment, down-stream of sample location SW-1. The collected samples were transferred into laboratory prepared containers, placed in a cooler with ice, and submitted for analysis for TCL SVOCs by Method 8270. Surface Water Sampling Field Data forms are contained in **Appendix I.** The laboratory analytical report is in **Appendix II**.

2.3 Pilot Test System Operations

The VCC Work Plan included a second long term bio-sparge pilot test to be conducted in the vicinity of monitoring well MW-14A. For this bio-sparge pilot test, SCDHEC issued a Permit to Construct one Class V.A.-I injection well at the Marsh Lumber Company site (bio-sparge well BSW-3), UIC Permit #SCHE03020255M, dated June 27, 2016. The permit to operate was issued by SCDHEC on October 17, 2016. The bio-sparge system obtains compressed air from an air-compressor used for multiple purposes at the Marsh facility. Compressed air is supplied to the bio-sparge system control panel located in a building located north of the former Green Chain Area (see **Figure 2**). A pressure regulator provides for control over the air-pressure (pounds per square inch – PSI) delivered to the sparge well, whereas a flow controller provides for the control over the air flow rate (cubic feet per minute – CFM) delivered to the sparge well.

The bio-sparge system has operated with injection well BSW-3 set at approximately 10 PSI with an air flow rate of approximately two CFM. The system was operated five days a week, Monday through Friday, typically between the hours of 7 AM and 5 PM.

The expanded pilot test program included the installation of five additional bio-sparge wells to enhance the area of groundwater treatment, manage the migration of PCP within the test area, and monitor for PCP concentration changes. The installation of five new sparge wells and appurtenant equipment and fixtures commenced the week of April 16, 2018. On May 18, 2018, the Permit to Operate five new wells and the one existing well (BSW-3) as Class V.A.-1 wells was received from SCDHEC. On May 25, 2018, operation of the expanded bio-sparge pilot test wells system commenced. The expanded bio-sparge system operates with injection well pressures set at approximately 10 PSI and injection well air flow rates of approximately two CFM. The six injection wells operate on a timer, which cycles wells on and off. The system was operates five days a week, Monday through Friday, typically between the hours of 7 AM and 5 PM.

On February 18, 2019, S&ME observed water, air, and sediment bubbling from a small hole in the ground approximately 15 feet east of bio-sparge well BSW-8. The bubbling was inferred to represent a possible short-circuit of air injected into sparge well BSW-8. The hole is located near the boundary between soil representing the prior developed land surface and fill soils placed during 2016 to improved wet weather vehicular access to monitoring wells. Following discovery this condition, well BSW-8 was shut-down temporarily. Reactivation of bio-sparge well BSW-8 may be attempted after cessation of injecting air into this well for 60-90 days, to assess if the temporary cessation would reestablish natural subsurface conditions, permitting air injection at BSW-8.

In general the system has operated as expected, with minor air flow and air pressure adjustment made for each sparge well, only if needed.

3.0 Summary of Findings

3.1 Groundwater Occurrence and Flow Direction

On February 18, 2019, depth to groundwater data was collected from the monitoring. The depth to groundwater and top of casing elevation data were used to calculate the groundwater elevations at the monitoring wells. **Table 1** provides a summary of the groundwater elevation data for the February 18, 2019 along with well construction data. **Figure 3** depicts groundwater elevation surface contours prepared using the February 18, 2019 data. The data suggest that groundwater flow in the water table aquifer beneath the studied area is generally migrating west toward a segment of an unnamed tributary of the Big Swamp along Walnut Street. The inferred groundwater flow direction was generally consistent with prior assessment observations. **Appendix III** contains Table III-1, which summarizes historic depth to groundwater and groundwater elevation data.

3.2 Water Quality

3.2.1 Semi-Volatile Organics

Table 2 provides a summary of the groundwater analytical results for the monitoring wells sampled between February 18, 2019 and February 21, 2019, and also includes historic analytical results for monitoring wells included in the Bio-Sparge pilot test program. For this annual monitoring event analytical results for SVOCs by Method 8270 reported the following detections:

- PCP was detected in monitoring well MW-22 at concentrations of 128 microgram per liter (µg/L).
- PCP was detected in monitoring well MW-25 at concentrations of 47.4 µg/L.
- PCP was detected in monitoring well MW-28 at concentrations of 151 µg/L.

Table 2 also provides a summary of the PCP results by Method 8151. For sample locations where PCP was detected, Method 8151 reported a lower PCP concentration when compared with the results obtained by Method 8270. It is noteworthy that the analytical results for PCP by Method 8151 indicate that monitoring wells MW-15, MW-18B, MW-19, MW-23 and MW-24 define the down-gradient horizontal extent of the 1 µg/L PCP plume, with a PCP plume that was delimited to the subject site.

Relying upon the Method Detection Limit (MDL) or reported concentrations for PCP at each sampled location **Figure 3** depicts a conservative estimate of a 4 µg/L PCP isoconcentration line in the pilot test area. The estimated 1 µg/L PCP isoconcentration line shown was based on the Method 8151 analytical results. **Figure 4** and **Figure 5** provides cross-sections A-A' and B-B' depicting subsurface stratigraphy and recent groundwater PCP concentrations at each monitoring well shown.

It is important to take note of the non-detection of PCP at well MW-14A, in the core of the 2nd bio-sparge pilot test area. PCP has not been detected at well MW-14A by Method 8270 for five consecutive monitoring events, with the last detection of PCP occurring on June 7, 2017. For the recent monitoring event, the Method 8151 analytical results for well MW-14A reported PCP as less than 0.51 µg/L.

Appendix III contains Table III-2, which provides a summary of historic groundwater analytical data.

3.2.2 Additional Analytical and Field Parameters

PCP is a biocide historically used in wood preserving. Literature reviewed indicated that there are microorganisms capable of biodegrading PCP despite its toxicity with prospects better when PCP is present in lower concentrations. The success of biodegradation depends on the presence and survival of degrader microorganisms in the subsurface environment. As documented in the Work Plan for the 2nd Bio-Sparge Pilot Test, research into published literature for bio-sparging remediation PCP in groundwater revealed very limited published data for expected daughter compounds and reliable indicator parameters for an aerobic degradation pathway. Based on the apparent success of the first pilot test utilizing sparge well BSW-1, monitoring for 2nd Bio-Sparge Pilot Test primarily focused on evaluating changes in PCP concentrations over time, localized changes in PCP distribution, and the collection of certain field and laboratory parameters representing possible bio-degradation indicators and/or indicators of potentially suitable aquifer conditions for aerobic biodegradation.

Accordingly, in addition to SVOCs, groundwater samples obtained from the monitoring wells sampled were also analyzed for Alkalinity, Chloride, and Total Organic Carbon (TOC), as potential indicator parameters. Analytical results for these parameters are also summarized in **Table 2** and discussed in Section 4.0.

3.2.3 *Surface Water Quality*

Table 4 provides a summary of the current and historic surface water analytical results. Analytical results for the surface water samples collected on February 18, 2019, at sample locations SW-1, SW-2, SW-3 and SW-4 reported no targeted SVOCs were detected at the sampled locations. Surface water sample locations are depicted on **Figure 3**.

4.0 Bio-Sparge Pilot Test

The following trends in PCP concentrations can be inferred from the groundwater analytical data collected:

- The PCP concentration at monitoring well MW-14A remained less than the Method 8270 MDL of 3.5 µg/L, down from the 214 µg/L prior to pilot testing. Analytical results by Method 8151 reported PCP as less than 0.51 µg/L. This well is approximately 15 feet from the closest injection well.
- The PCP concentration at monitoring well MW-28 continue to decline. The most recent concentration represents an estimated 57% reduction when compared with the baseline concentration. This well is approximately 30 feet north of the closest injection well.
- The PCP concentration at monitoring well MW-21 remained less than the Method 8270 MDL of 3.5 µg/L, apparently down from the estimated 16.5 µg/L prior to pilot testing. This well is approximately 46 feet north of the closest injection well.
- The PCP concentration at monitoring well MW-22 appeared to increase following the initiation of the pilot test, followed by an overall trend of declining concentrations. The most recent PCP concentration represents an estimated 56% reduction when compared with the concentration reported for December 12, 2016. This well is approximately 68 feet east of the closest injection well.
- The PCP concentrations for monitoring well MW-25 indicate a persistent reduction in PCP concentrations. The most recent concentration represents an estimated 69% reduction when compared with the baseline concentration. This well is 45 feet south of the closest injection well.
- The reported PCP concentrations for monitoring well MW-27 suggest an initial decrease in the PCP concentration that has been sustained over the last four monitoring events. The Method 8151 PCP concentration was reported to be 2.0 µg/L. This well is 45 feet south of the closest injection well.

Appendix IV includes time vs PCP concentration graphs for select monitoring wells.

As discussed in Section 3.2.2 groundwater samples obtained from select monitoring well in the immediate vicinity of the pilot test were also analyzed for Alkalinity, Chloride, and Total Organic Carbon (TOC), as potential indicator parameters. **Table 2** provides a summary of the analytical results.

The spatial distribution of concentrations for each potential indicator parameter was examined for recognizable zonal patterns, which may indicate in-situ bio-degradation or conditions favorable for biodegradation of PCP. No obvious zonal patterns for chloride and TOC were recognized. A review of recent and historic alkalinity concentrations and their spatial distribution revealed that alkalinity was lower at monitoring wells in areas of previously documented PCP impacts. Alkalinity was higher in areas beyond the PCP plume, such as monitoring wells MW-13A, MW-15, MW-18B, MW-19, MW-23, MW-24, and MW-30. Bicarbonate (HCO_3) contributes

substantially to alkalinity in groundwater. The zone of reduced alkalinity, if linked to reduced bicarbonate, may be indicative of past anaerobic bio-degradation by way of manganese reduction and/or iron reduction.

With regards to groundwater field parameters, bio-sparging involves increasing in-situ dissolved oxygen (DO) to stimulate aerobic biological activity. Based on the field data for the February 2019 monitoring event, site wide DO levels in the water table aquifer were generally less than 1 µg/L often on the order of 0.1 to 0.5 µg/L. The DO level at monitoring well MW-14A, located approximately 15 feet from injection well BSW-3 was 8.3 µg/L. Based on the available DO data, the area of influence for bio-sparge injection well BSW-3 extends greater than 15 feet from BSW-3 in the direction of monitoring well MW-14A and less than 30 feet from injection well BSW-3 in the direction of monitoring well MW-28. The observed DO levels at monitoring well MW-25 up-gradient of sparge well BSW-6, monitoring well MW-26 cross-gradient of sparge well BSW-6, and monitoring well MW-28 up-gradient of sparge well BSW-3 have not shown anticipated increases in DO. The area of direct influence for these referenced sparge wells may be smaller than expected or have a less than uniform shape.

5.0 Discussion

The groundwater analytical results for this annual water quality event indicate that the horizontal extent of PCP in the water table aquifer was generally consistent with prior assessments. For this event monitoring well MW-3A functioned at the up-gradient monitoring well, historically monitoring well MW-1 provided this function. This modification was possible with the successful reduction of PCP concentrations at monitoring well MW-3A, an outcome of the 1st Bio-sparge pilot test. Groundwater samples obtained from monitoring well MW-3A have consistently reported PCP concentrations as less than the Method 8270 MDL beginning in February 2016. Thus, no evidence of PCP concentration rebound has been observed in the last three years. Analytical results for this event provided no noteworthy changes in PCP concentrations for monitoring wells located outside of the 2nd Bio-sparge pilot test vicinity.

Initially the 2nd bio-sparge pilot test employed a single bio-sparge well. The pilot test program was expanded in 2018 with the addition of five new bio-sparge wells to enhance the area of groundwater treatment. New groundwater quality monitoring wells were positioned to monitor for potential localized changes in contaminant distribution or preferential pathways for contaminant migration. On May 25, 2018, operation of the expanded bio-sparge pilot test wells system commenced. Pilot testing data has been invaluable and provided information that permits refinement of air pressure and injection rates used during the pilot test and for full scale design. The collection of additional pilot test data was warranted for final decision making.

Analytical results received for this monitoring event continue to suggest declining concentrations of PCP in the water table aquifer in the vicinity of bio-sparge pilot test area. The historic occurrence of PCP in the vicinity of BSW-3 was consistent with existing Conceptual Site Model (CSM), which recognizes that the stratigraphy of the site's coastal plain sediments could influence migration and distribution of PCP in the water table aquifer. The top of the clay-rich layer at the base of the water table aquifer exhibits varying topography. A relative low point in the top of the clay-rich layer was previously discovered in the vicinity of monitoring well MW-13A. The CSM considered that undulations in the top of the clay-rich layer could influence the migration of dissolved-phase PCP and provide migration pathways that deviate from those expected based solely on hydraulic gradients. Accordingly, the observed changes in PCP concentrations at monitoring well MW-22 are thought to in part substantiate the existence of a natural preferential flow path associated with the slope of the top of the clay-rich

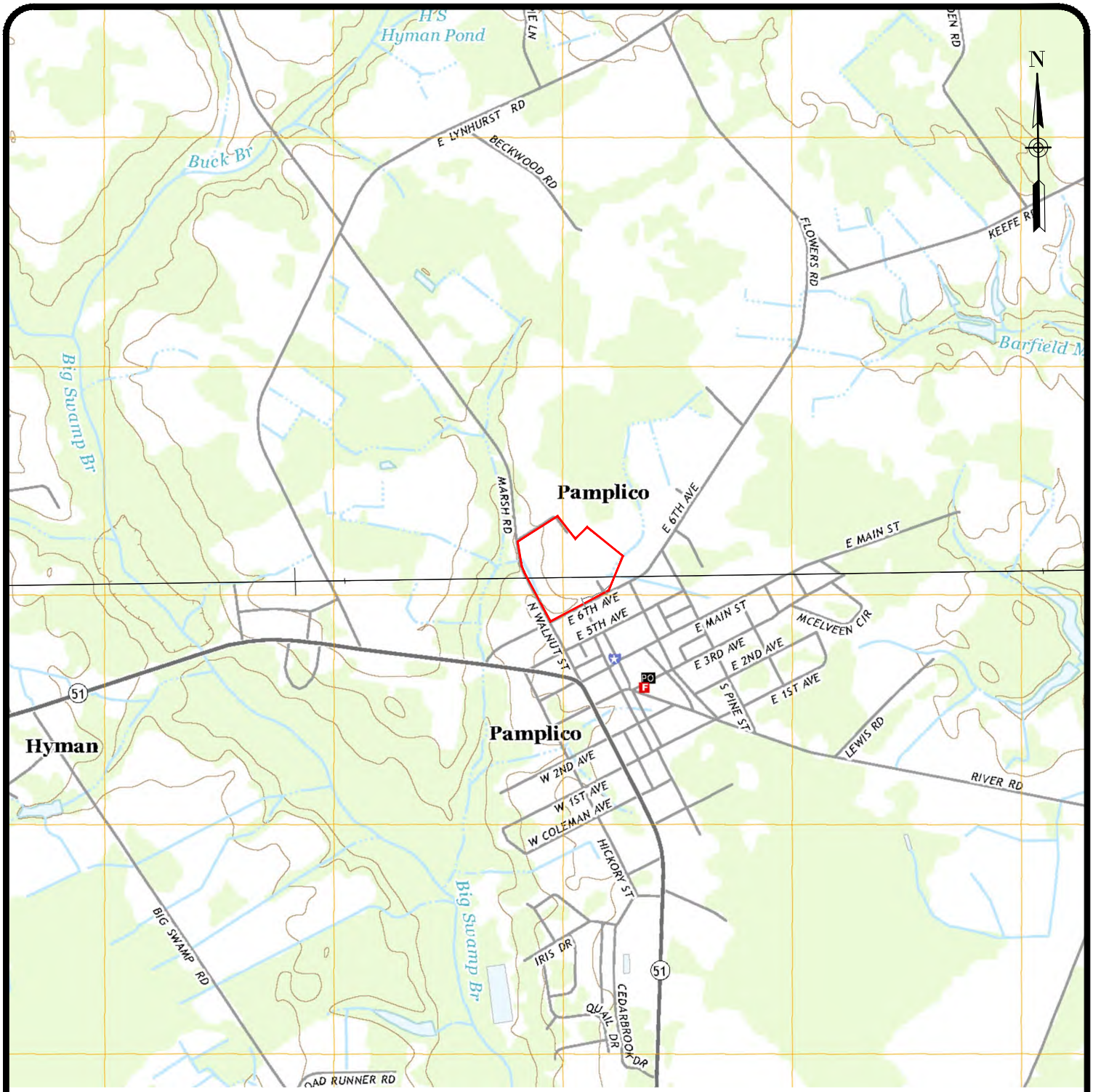
layer (i.e. cross-gradient from MW-14A toward MW-22). Monitoring of groundwater at wells MW-13A and MW-30 during pilot testing has and will continue to aid in validation or rejection of this theory. In short, the CSM for contaminant migration associated with this incident appears to remain logical and functional for this incident. No modifications of the CSM are recommended based on the data collected for this monitoring event.

Observed changes in PCP concentrations over time at monitoring wells MW-14A, MW-22, MW-25, MW-26 and MW-28 remain the most noteworthy indicators that the pilot test has resulted in generally consistent reductions in PCP concentrations. Analytical data for the February 2019 event suggests that PCP concentrations have been reduced to less than 1 µg/L at monitoring well MW-14A. PCP concentrations reductions of greater than 50% were indicated for monitoring wells MW-22, MW-25, and MW-28. The data collected provides no definitive indicators of bio-sparging simply displacing PCP causing it to migrate by dispersion. The 2017 assessment activities added multiple monitoring wells positioned thoughtfully at locations and distances about the sparge well network for the detection of PCP migration during the pilot.

S&ME recommends continuation of the pilot test during 2019.

6.0 Sole Use Statement

All materials and information obtained by S&ME on this project are provided for the sole use of Marsh Furniture Company, Inc. and SCDHEC for this project. Use of the report issued for this project by any third parties will be at such party's sole risk. S&ME disclaims liability for any use of or reliance on the report issued for this project by third parties.



SOURCE: PAMPLICO NORTH, SC AND PAMPLICO SOUTH, SC, 7.5-MINUTE SERIES, USGS TOPOGRAPHIC MAPS (2014).

0 2000 4000

GRAPHIC SCALE (IN FEET)

AREA TOPOGRAPHIC MAP

MARSH LUMBER
PAMPLICO, SOUTH CAROLINA

SCALE:	FIGURE NO.
AS SHOWN	1
DATE:	
APRIL 2019	
PROJECT NUMBER	
1584-98-146C	

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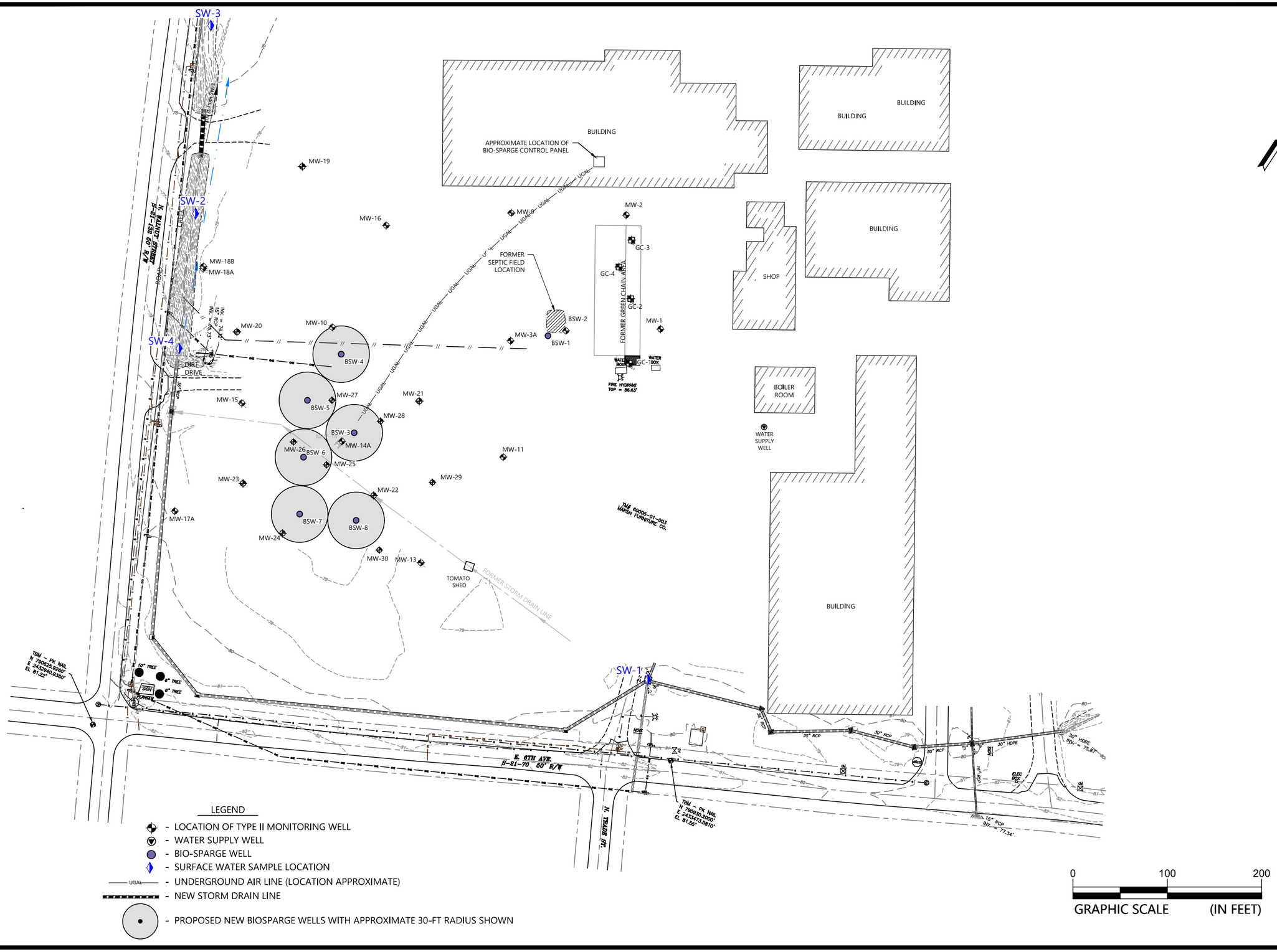

LEGEND

- LOCATION OF TYPE II MONITORING WELL
- WATER SUPPLY WELL
- BIO-SPARGE WELL
- SURFACE WATER SAMPLE LOCATION
- UNDERGROUND AIR LINE (LOCATION APPROXIMATE)
- NEW STORM DRAIN LINE
- PROPOSED NEW BIOSPARGE WELLS WITH APPROXIMATE 30-FT RADIUS SHOWN

SITE PLAN

MARSH LUMBER
PAMPLICO, SOUTH CAROLINA

SCALE:
AS SHOWN

DATE:
APRIL 2019

PROJECT NUMBER
1584-98-146C

FIGURE NO.
2

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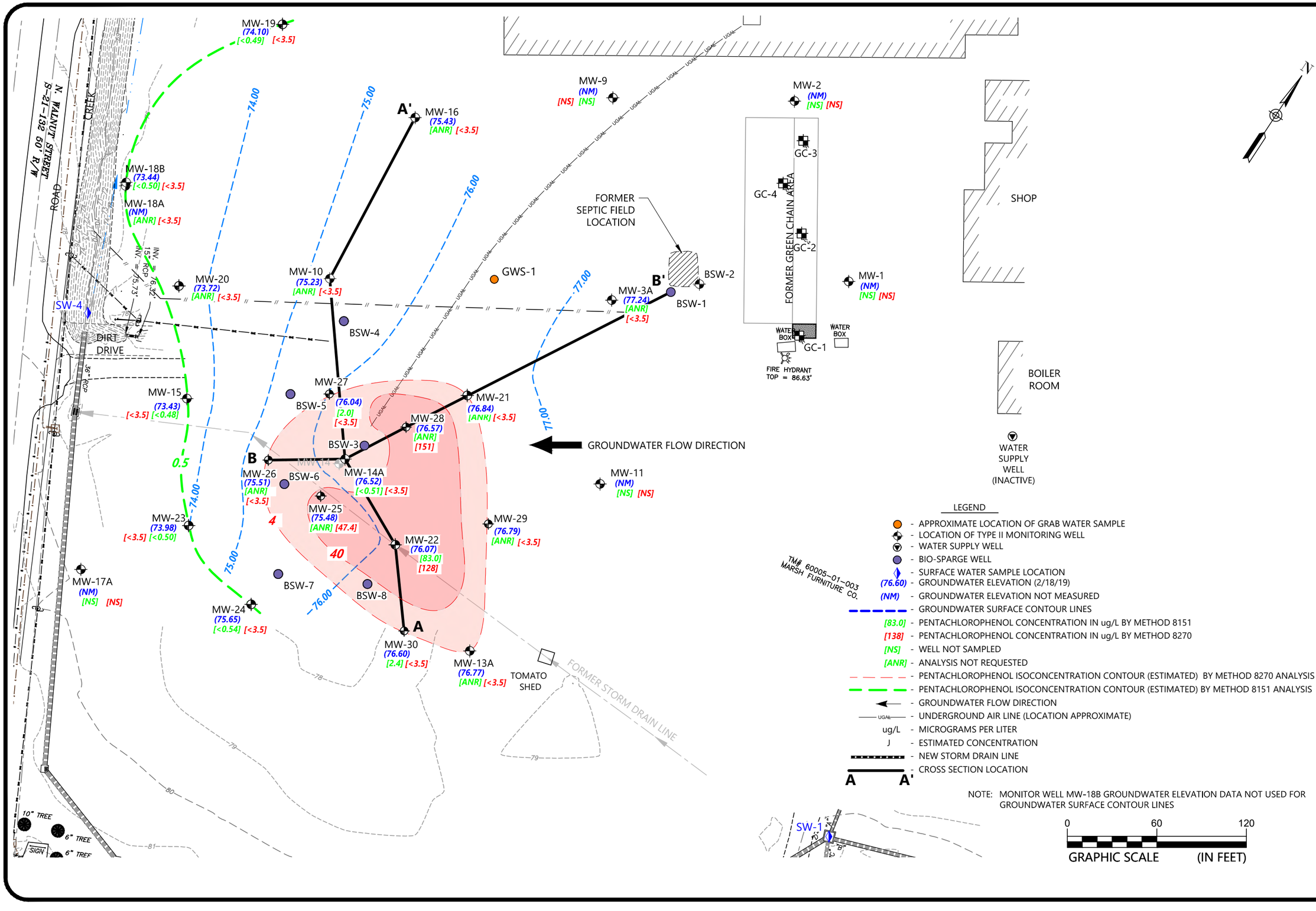

LEGEND

- APPROXIMATE LOCATION OF GRAB WATER SAMPLE
- LOCATION OF TYPE II MONITORING WELL
- WATER SUPPLY WELL
- BIO-SPARGE WELL
- SURFACE WATER SAMPLE LOCATION
- (76.60) - GROUNDWATER ELEVATION (2/18/19)
- (NM) - GROUNDWATER ELEVATION NOT MEASURED
- GROUNDWATER SURFACE CONTOUR LINES
- [83.0] - PENTACHLOROPHENOL CONCENTRATION IN ug/L BY METHOD 8151
- [138] - PENTACHLOROPHENOL CONCENTRATION IN ug/L BY METHOD 8270
- [NS] - WELL NOT SAMPLED
- [ANR] - ANALYSIS NOT REQUESTED
- PENTACHLOROPHENOL ISOCONCENTRATION CONTOUR (ESTIMATED) BY METHOD 8270 ANALYSIS
- PENTACHLOROPHENOL ISOCONCENTRATION CONTOUR (ESTIMATED) BY METHOD 8151 ANALYSIS
- GROUNDWATER FLOW DIRECTION
- UGAL - UNDERGROUND AIR LINE (LOCATION APPROXIMATE)
- ug/L - MICROGRAMS PER LITER
- J - ESTIMATED CONCENTRATION
- NEW STORM DRAIN LINE
- A A' - CROSS SECTION LOCATION

NOTE: MONITOR WELL MW-18B GROUNDWATER ELEVATION DATA NOT USED FOR GROUNDWATER SURFACE CONTOUR LINES

0 60 120

GRAPHIC SCALE (IN FEET)

GROUNDWATER DATA - FEBRUARY 2019

MARSH LUMBER
PAMPLICO, SOUTH CAROLINA

SCALE:
AS SHOWN

DATE:
APRIL 2019

PROJECT NUMBER
1584-98-146C

FIGURE NO.
3

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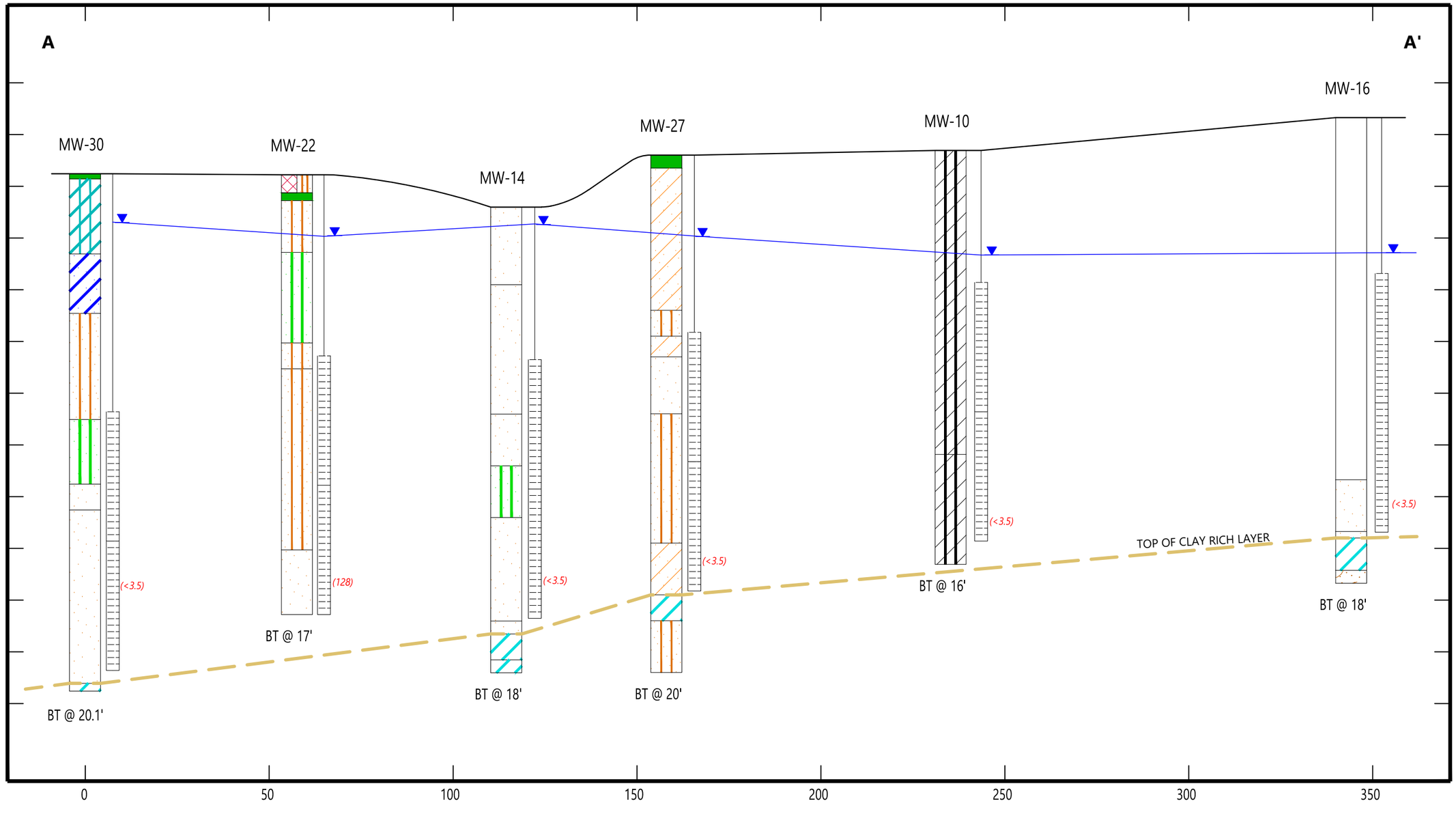


Clayey Silt
Shell Hash
Silty Clay
Sand
Silty Sand
Sandy Clay
Sandy Silt
Topsoil
Clay
Clayey Sand

(xxx) - PCP CONCENTRATION IN ug/L

0 4 8
VERTICAL SCALE (IN FEET)

Drawing path: Q:\1584\98\98-146 - MARSH LUMBER\CY4-19\Pamplico Cross Sections.dwg

CROSS-SECTION A - A'

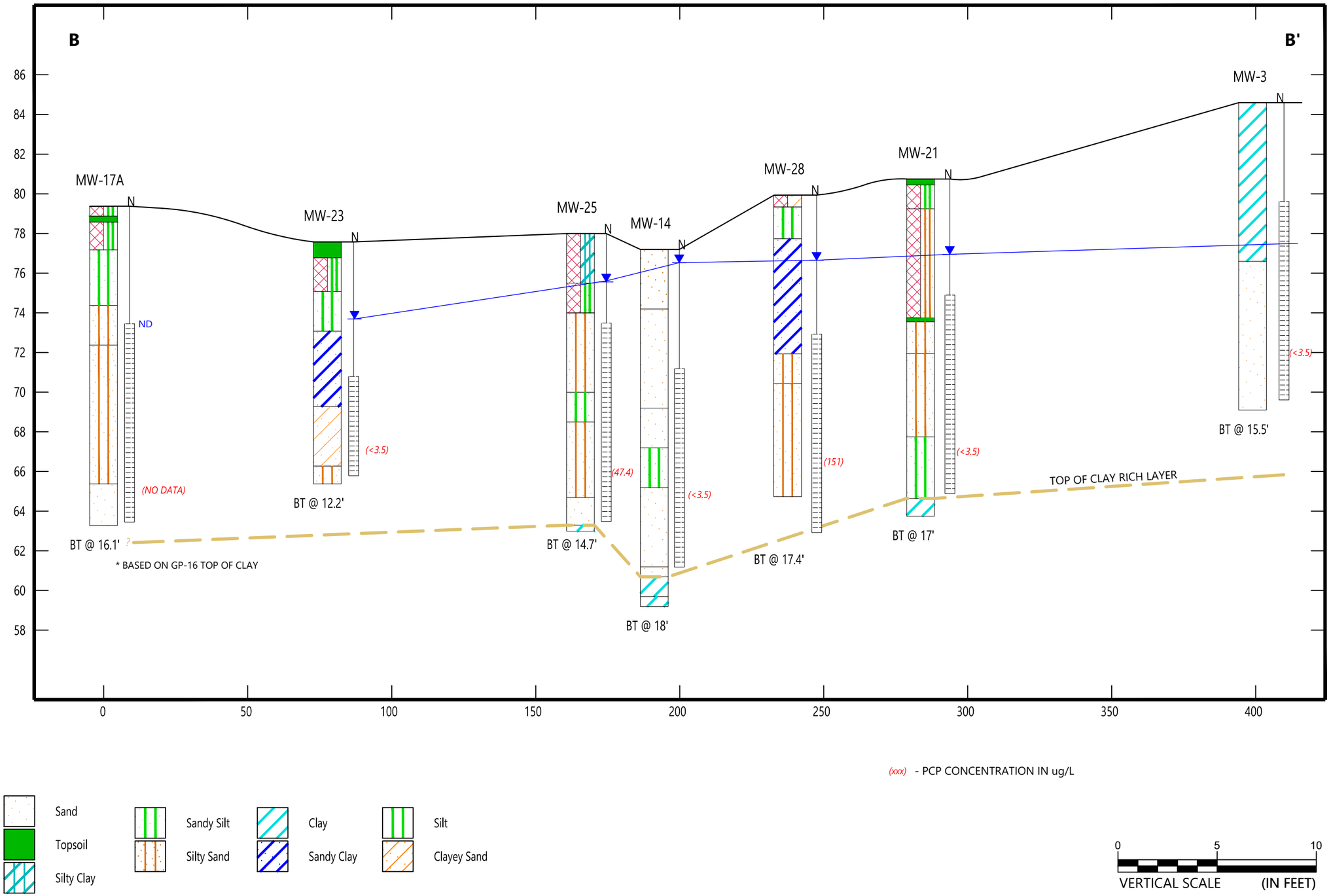
MARCH LUMBER
PAMPLICO, SOUTH CAROLINA

SCALE:
AS SHOWN

DATE:
APRIL 2019

PROJECT NUMBER
1584-98-146C

FIGURE NO.
4



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CROSS-SECTION B - B'

MARSH LUMBER
PAMPLICO, SOUTH CAROLINA

SCALE:
AS SHOWN

DATE:
APRIL 2019

PROJECT NUMBER
1584-98-146C

FIGURE NO.
5

Table 1
Well Construction Details & Groundwater Elevation Data
Marsh Lumber Company
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Well ID	Date Well Completed	Total Depth (feet bls.)	Well Diameter (inches)	Screen Interval (feet bls.)		Top of Casing Elevation$_1$ (mean sea level)	Depth to Groundwater March 14, 2018 (feet below TOC)	Groundwater Elevation March 14, 2018 (mean sea level)	Depth to Groundwater 2/18/2019 (feet below TOC)	Groundwater Elevation 2/18/2019 (mean sea level)
MW-1	1/4/1993	15.3	2	5.3	15.3	85.55	not measured	not determined	not measured	not measured
MW-3A	12/14/2004	15.0	2	5.0	15	88.59	11.37	77.22	11.35	77.24
MW-9	10/8/1993	18.0	2	8.0	18	83.50	not measured	not determined	not measured	not measured
MW-10	10/8/1993	15.0	2	5.0	15	83.30	8.35	74.95	8.07	75.23
MW-11	10/11/1993	15.0	2	5.0	15	85.61	8.07	77.54	not measured	not measured
MW-13A	12/14/2004	22.0	2	7.0	22	83.52	6.90	76.62	6.75	76.77
MW-14A	8/16/2000	16.0	2	6.0	16	81.11	4.55	76.56	4.59	76.52
MW-15	8/16/2000	15.0	2	5.0	15	82.32	8.73	73.59	8.89	73.43
MW-16	8/16/2000	16.0	2	6.0	16	83.65	8.26	75.39	8.22	75.43
MW-17A	9/9/2016	15.9	2	5.9	15.9	82.37	9.70	72.67	not measured	not measured
MW-18A	1/7/2009	15.2	2	13.2	15.2	80.27	8.34	71.93	not measured	not measured
MW-18B	1/7/2009	6.7	2	4.7	6.7	80.17	7.07	73.10	6.73	73.44
MW-19	9/8/2016	17.6	2	7.4	17.4	79.56	5.89	73.67	5.46	74.10
MW-20	9/9/2016	13.9	2	3.9	13.9	80.59	7.17	73.42	6.87	73.72
MW-21	9/9/2016	15.8	2	5.8	15.8	84.04	7.13	76.91	7.20	76.84
MW-22	9/9/2016	17.1	2	7.1	17.1	81.74	5.73	76.01	5.67	76.07
MW-23	9/9/2016	11.8	2	6.8	11.8	81.37	7.30	74.07	7.39	73.98
MW-24	5/23/2017	14.0	2	4.0	14.0	81.23	5.56	75.67	5.58	75.65
MW-25	10/31/2017	14.6	1	4.5	14.5	80.49	5.02	75.47	5.01	75.48
MW-26	10/30/2017	14.3	1	9.2	14.2	81.21	5.75	75.46	5.70	75.51
MW-27	10/30/2017	17.1	1	7.0	17.0	82.20	6.29	75.91	6.16	76.04
MW-28	10/30/2017	17.1	1	7.0	17.0	83.03	6.31	76.72	6.46	76.57
MW-29	10/31/2017	20.1	1	10.0	20.0	82.90	6.23	76.67	6.11	76.79
MW-30	10/31/2017	19.4	1	9.3	19.3	81.58	5.06	76.52	4.98	76.60
BSW-2	1/9/2009	20.0	2	10.0	20.0	no data	not measured	not determined	not measured	not measured
BSW-3	9/9/2016	16.9	2	15.0	16.8	no data	not measured	not determined	not measured	not measured

Top of Casing Elevations$_1$ = Based data provided by Nesbitt Surveying Company, Inc. on 10/27/2016
feet bls. = feet below land surface
feet below TOC = feet below top of well casing
Riser* = relative to top of casing

Table 2
Groundwater Data Summary
Marsh Lumber Company
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Sample ID	Position Relative to Bio-Sparge Well	Distance To Bio-sparge Well (Feet)	Date Sample Collected	Method 8270 (BNA)				Method 8151	General Chemistry			Field Parameters							
				Pentachlorophenol		2,3,4,6 Tetrachlorophenol		PCP	Alkalinity	Chloride	TOC	DTGW	GWE	Temp	pH	Cond.	D.O.	ORP	Turbidity
				RL (µg/L)	MDL (µg/L)	RL (µg/L)	MDL (µg/L)	RL (µg/L)	(mg/L)	(mg/L)	(mg/L)	(feet)	(feet)	(Celsius)	(s.u.)	(µs/cm^{-3})	(mg/L)	(millivolts)	(NTU)
MW-3A	Up-Gradient	192	3/13/2018	<50	3.5	not detected	**	not requested	9.2	4.1	2.3	11.37	77.22	16.2	5.0	122	0.9	228	20.8
			2/18/2019	<24.8	3.5	<9.9	2.9	not requested	not requested	not requested	not requested	11.35	77.24	18.3	5.4	130	0.5	243	48.3
MW-16	Cross-Gradient	122	3/13/2018	<51	3.6	not detected	**	not requested	66.3	15.7	2.9	8.26	75.39	16.1	5.6	216	0.4	201	12.6
			2/19/2019	<25.0	3.5	<10.0	2.9	not requested	not requested	not requested	not requested	8.22	75.43	14.9	6.6	353	1.1	292	55.2
MW-18B	Down-gradient	170	3/13/2018	<51	3.6	not detected	**	not requested	382	11.9	1.4	7.07	73.10	15.3	6.7	616	0.8	34	0.3
			2/19/2019	<25.0	3.5	<10.0	2.9	<0.50	not requested	not requested	not requested	6.73	73.44	13.2	7.1	704	1.4	2	8.7
MW-19	Cross-Gradient	202	3/13/2018	<51	3.6	not detected	**	not requested	314	25.2	7.5	5.89	73.67	16.5	6.2	586	0.2	6	7.6
			2/19/2019	<25.0	3.5	<10.0	2.9	<0.49	not requested	not requested	not requested	5.46	74.10	16.2	6.5	750	0.3	-61	19.4
MW-20	Down-gradient of BSW-4	112	3/13/2018	<49	3.5	not detected	**	not requested	201	10.6	<1.0	7.17	73.42	16.7	7.0	335	0.2	-64	0.3
			9/19/2018	<27.2	3.8	<10.9	3.2	not requested	223	10.2	<1.0	6.63	73.42	24.1	7.0	432	0.2	-78	3.6
			2/20/2019	<25.0	3.5	<10.0	2.9	not requested	not requested	not requested	not requested	6.87	73.72	14.5	7.3	377	0.2	-98	7.4
MW-10	Down Gradient of BSW-4	31	9/14/2016	<50	4.6	not requested	not requested	not requested	302	12.0	1.9	6.77	76.53	25.2	6.7	546	0.0	-8	8.8
			12/8/2016	<50	4.6	not requested	not requested	not requested	235	18.2	1.9	8.22	75.08	19.9	6.4	664	1.6	15	8.2
			2/21/2017	**16.0 J**	4.6	<10	2.3	not requested	207	19.8	4.0	8.47	74.83	17.4	6.2	57	2.1	107	7.7
			5/24/2017	<25.0	2.4	<10	2.3	not requested	193	19.8	3.8	8.70	74.60	21.8	6.4	446	0.2	-149	6.3
			8/30/2017	<50	3.5	not requested	not requested	not requested	141	20.4	3.1	8.84	74.46	24.0	6.5	460	1.2	77	2.9
			3/14/2018	<52.1	3.7	not detected	**	not requested	114	18.3	3.4	8.35	74.95	15.8	5.5	390	0.4	130	6.8
			6/26/2018	**30.4**	3.5	<9.8	2.9	not requested	115	17.3	4.4	9.34	73.96	23.1	5.9	390	0.3	162	17.1
			9/19/2018	<25.5	3.6	<10.2	3.0	not requested	142	14.9	9.3	7.45	74.95	24.0	6.1	375	0.4	76	6.5
			2/19/2019	<25.0	3.5	<10.0	2.9	not requested	not requested	not requested	not requested	8.07	75.23	14.8	6.3	313	0.2	113	4.0
MW-14	Down Gradient of BSW-3	15	9/14/2016	**214**	4.6	not requested	not requested	not requested	35.7	8.4	4.7	5.51	75.6	26.5	5.1	13	0.0	77	4.9
"			12/13/2016	<250	23.2	not requested	not requested	not requested	<5.0	12.6	9.6	5.97	75.14	17.6	5.0	142	6.7	225	489
"			2/21/2017	<250	23.2	<100	22.6	not requested	3.2 J	16.3	12.7	7.05	74.06	41.4	5.8	81	2.4	272	228
MW-14A			6/7/2017	**122**	4.6	<10.0	22.6	not requested	6.0	7.4	1.9	5.19	75.92	21.4	5.5	74	6.2	40	3.3
"			8/30/2017	<50	3.5	not requested	not requested	not requested	9.2	8.4	1.4	5.88	75.23	24.9	6.0	83	6.7	103	2.0
"			3/14/2018	<50	3.5	not detected	**	not requested	<5.0	8.5	1.5	4.55	76.56	15.6	5.5	65	8.6	381	7.6
"			6/26/2018	<24.5	3.5	<9.8	2.9	not requested	<5.0	9.2	1.4	5.52	75.59	23.4	5.0	79	5.9	194	16.0
"			9/21/2018	<26.6	3.7	<10.6	3.1	not requested	5.3	8.8	2.5	4.21	76.56	23.2	5.3	90	6.6	233	12.1
"			2/20/2019	<25.0	3.5	<10.0	2.9	<0.51	26.2	8.9	2.5	4.59	76.52	13.4	6.2	111	8.3	337	8.9
MW-15	Down Gradient of BSW-5	70	9/14/2016	<50	4.6	not requested	not requested	not requested	346	25.2	9.1	8.34	73.98	26.0	6.1	663	0.3	-64	14.9
			12/8/2016	<50	4.6	not requested	not requested	not requested	322	24.1	10.4	8.64	73.68	18.5	6.2	843	4.5	-65	6.1
			2/21/2017	<25	2.3	<10	2.3	not requested	312	23.8	7.3	9.34	72.98	16.5	6.6	627	0.0	-16	5.5
			5/23/2017	<31.2	2.9	<12.5	1.2	not requested	306	21.4	6.4	9.14	73.18	20.6	6.3	612	0.2	-46	10.2
			8/30/2017	<50	3.5	not requested	not requested	not requested	318	20.6	8.6	9.31	73.01	25.5	6.5	658	0.7	-32	4.4
			3/13/2018	<52.1	3.7	not detected	**	not requested	352	18.1	7.4	8.37	73.59	16.7	6.1	570	0.2	-24	8.6
			9/19/2018	<24.8	3.5	<9.9	2.9	not requested	331	15.7	12.1	8.91	73.59	25.6	6.2	680	0.2	-52	9.6
			2/20/2019	<25.0	3.5	<10.0	2.9	<0.48	not requested	not requested	not requested	8.89	73.43	13.6	6.4	713	0.2	-40	10.4
RSL - Tapwater				0.041		240		0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Maximum Contaminant Level (MCL)				1		no standard		1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

J =concentration shown is estimated

Bold value indicates a detection above the method reporting detection limit (MDL)

Yellow shaded cell indicates detected concentration is greater than the corresponding MCL

Table 2
Groundwater Data Summary
Marsh Lumber Company
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Sample ID	Position Relative to Bio-Sparge Well	Distance To Bio-sparge Well (Feet)	Date Sample Collected	Method 8270 (BNA)				Method 8151	General Chemistry			Field Parameters						
				Pentachlorophenol		2,3,4,6 Tetrachlorophenol		PCP	Alkalinity	Chloride	TOC	DTGW	GWE	Temp	pH	Cond.	D.O.	ORP	Turbidity
				RL (µg/L)	MDL (µg/L)	RL (µg/L)	MDL (µg/L)	RL (µg/L)	(mg/L)	(mg/L)	(mg/L)	(feet)	(feet)	(Celsius)	(s.u.)	(µs/cm-3)	(mg/L)	(millivolts)	(NTU)
MW-21	Up Gradient of BSW-3	76	9/15/2016	**16.5 J**	4.6	not requested	not requested	not requested	26.7	8.9	2.1	7.94	76.1	28.8	5.5	161	0.0	189	19.0
			12/14/2016	<50	4.6	not requested	not requested	not requested	18.3	9.1	1.0	6.10	77.94	19.5	5.4	148	2.1	146	0.2
			2/21/2017	**6.5 J**	2.3	not requested	not requested	not requested	15.9	9.1	1.5	7.66	76.38	17.3	5.8	102	0.1	214	4.0
			5/24/2017	<31.2	2.9	<12.5	1.2	not requested	8.4	9.0	1.8	7.67	76.37	21.2	5.0	79	0.3	109	7.2
			8/30/2017	<50	3.5	not requested	not requested	not requested	8.9	9.1	1.5	8.11	75.93	25.7	5.3	85	0.8	117	4.3
			3/14/2018	<52.1	3.7	not detected	**	not requested	7.1	7.9	1.8	7.13	76.91	16.1	4.7	92	1.3	212	8.0
			2/21/2019	<24.8	3.5	<9.9	2.9	not requested	58.5	7.3	4.1	7.20	76.84	16.5	6.1	148	0.6	255	26.3
MW-22	Cross Gradient of BSW-8	32	9/15/2016	<50	4.6	not requested	not requested	not requested	178	5.7	<1.0	5.79	75.95	29.0	6.5	308	0.0	-56	13.0
			12/8/2016	**294**	4.6	not requested	not requested	not requested	153	8.5	<1.0	5.56	76.18	18.4	6.5	369	1.8	33	1.5
			2/21/2017	**472**	11.6	**5.3 J**	2.3	not requested	93.9	9.8	1.2	5.87	75.87	18.5	6.0	144	0.0	198	2.5
			5/24/2017	**358**	125	<10	1.2	not requested	31.3	10.6	1.7	6.21	75.53	20.8	5.4	120	0.2	-165	2.6
			8/30/2017	**339**	7.0	not requested	not requested	not requested	27.3	11.4	1.6	6.39	75.35	24.3	5.6	121	1.0	132	1.7
			3/14/2018	**271**	3.4	not detected	**	not requested	31.4	10	2.1	5.73	76.01	14.0	5.1	116	0.2	256	0.0
			6/26/2018	**150**	17.3	<9.8	2.9	not requested	29.8	9.6	1.2	6.84	74.90	24.3	4.8	131	0.2	161	0.6
			9/20/2018	**186**	18.0	<10.2	3.0	not requested	27.8	8.8	3.5	4.76	76.09	24.6	5.2	123	0.2	201	1.6
			2/18/2019	**128**	3.5	<9.8	2.9	**83.0**	47.8	7.3	1.7	5.67	76.07	16.5	5.5	131	0.3	190	0.1
MW-23	Down Gradient of BSW-6	70	9/15/2016	<50	4.6	not requested	not requested	not requested	297	7.1	11.8	7.57	73.80	27.0	6.2	558	0.0	-36	11.9
			12/13/2016	<50	4.6	not requested	not requested	not requested	403	11.0	14.4	7.20	74.17	17.4	6.4	934	2.5	-74	1.0
			2/21/2017	<25	2.3	<10	2.3	not requested	368	14.4	12.2	7.62	73.75	15.8	6.9	686	0.0	-43	7.1
			5/23/2017	<31.2	2.9	<12.5	1.2	not requested	400	14.6	13	7.79	73.58	20.7	6.4	807	0.2	-55	1.1
			8/30/2017	<50	3.5	not requested	not requested	not requested	404	15.8	12.1	8.03	73.34	25.6	6.7	799	0.6	-59	3.2
			3/14/2018	<52.1	3.7	not detected	**	not requested	640	17.4	15	7.30	74.07	14.8	6.4	969	0.1	-64	4.1
			9/21/2018	<25.0	3.5	<10.0	2.9	not requested	454	18.6	15.5	7.79	74.07	23.9	6.6	873	0.2	-93	2.3
			2/18/2019	<24.5	3.5	<9.8	3.5	<0.50	680	21.9	3.9	7.39	73.98	16.6	6.6	1,148	0.3	-87	24.7
MW-24	Cross Gradient of BSW-7	28	5/24/2017	<31.2	31.2	<12.5	1.2	not requested	1390	16.6	38.4	5.89	75.34	22.8	6.8	2,335	0.2	-176	21.5
			8/30/2017	<50	3.5	not requested	not requested	not requested	1300	16.4	38.0	6.53	74.70	24.5	7.0	2,113	0.5	-93	7.8
			3/14/2018	<50	3.5	not detected	**	not requested	1480	15.3	36.1	5.56	75.67	15.4	6.7	2,088	0.1	-134	2.6
			6/27/2018	<24.5	3.5	<9.8	2.9	not requested	1550	16.1	43.3	6.44	74.79	23.5	6.7	2,567	0.2	-133	11.4
			9/21/2018	<24.5	3.5	<9.8	2.9	not requested	1020	16.4	40.9	6.48	75.67	25.4	6.9	1,753	0.1	-144	12.8
			2/18/2019	<24.5	3.5	<9.8	2.9	<0.54	1310	16.2	37.2	5.58	75.65	15.8	7.0	2,037	0.4	-155	38.7
RSL - Tapwater				0.041		240		0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Maximum Contaminant Level (MCL)				1		no standard		1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

J =concentration shown is estimated
Bold value indicates a detection above the method reporting detection limit (MDL)
Yellow shaded cell indicates detected concentration is greater than the corresponding MCL
QA/QC samples: "Duplicate" collected on 9/15/2016 at MW-21 , "Dup-1" collected on 12/13/2016 at MW-23, and "Duplicate" collected on 2/21/2017 at MW-14

Table 2
Groundwater Data Summary
Marsh Lumber Company
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Sample ID	Position Relative to Bio-Sparge Well	Distance To Bio-sparge Well (Feet)	Date Sample Collected	Method 8270 (BNA)				Method 8151	General Chemistry			Field Parameters							
				Pentachlorophenol		2,3,4,6 Tetrachlorophenol		PCP	Alkalinity	Chloride	TOC	DTGW	GWE	Temp	pH	Cond.	D.O.	ORP	Turbidity
				RL (µg/L)	MDL (µg/L)	RL (µg/L)	MDL (µg/L)	RL (µg/L)	(mg/L)	(mg/L)	(mg/L)	(feet)	(feet)	(Celsius)	(s.u.)	(µs/cm^{-3})	(mg/L)	(millivolts)	(NTU)
MW-13A	Up Gradient of BSW-8	82	11/3/2017	<25	3.5	not requested	not requested	not requested	not requested	not requested	not requested	8.35	75.17	28.5	7.2	779	0.7	-150	3.5
			3/13/2018	<50	3.5	not detected	**	not requested	267	40.6	1.8	6.90	76.62	15.3	7.0	780	0.5	-57	121.0
			9/20/2018	<25.0	3.5	<10.0	2.9	not requested	323	92.1	9.6	6.19	76.62	25.2	6.8	719	0.1	-105	36.6
			2/21/2019	<24.5	3.5	<9.8	2.9	not requested	286	48.1	1.2	6.75	76.77	19.8	7.0	774	0.1	-103	23.9
MW-25	Up Gradient of BSW-6	25	11/2/2017	**151**	3.5	not requested	not requested	not requested	not requested	not requested	not requested	6.30	74.19	29.3	6.4	57	0.5	-19	112.0
			3/14/2018	**114**	3.7	not detected	**	not requested	121	10	4..2	5.02	75.47	14.9	5.3	287	0.3	43	21.0
			6/26/2018	**72.5**	3.5	<9.8	2.9	not requested	117	9.2	4.1	5.89	74.60	24.6	5.5	309	0.3	-2	7.6
			9/20/2018	**55.8**	3.5	<9.8	2.9	not requested	106	8	4.2	5.02	75.47	26.8	5.8	280	0.2	6	8.2
			2/20/2019	**47.4**	3.5	<10.0	2.9	not requested	84.7	9.2	3.6	5.01	75.48	13.5	6.0	208	0.2	31	12.0
MW-26	Cross Gradient of BSW-6	18	11/2/2017	<25	3.5	not requested	not requested	not requested	not requested	not requested	not requested	7.08	74.13	28.4	6.4	285	0.6	17	6.9
			3/14/2018	<55.6	3.9	not detected	**	not requested	170	11.2	2.3	5.75	75.46	16.3	5.8	345	0.2	-27	241
			6/27/2018	<24.5	3.5	<9.8	2.9	not requested	174	10.6	1.5	6.54	74.67	22.0	5.8	369	0.1	4	14
			9/20/2018	<25.0	3.5	<10.0	2.9	not requested	151	10.2	1.6	5.84	75.46	23.9	6	325	0.2	-4	13.4
			2/21/2019	<24.5	3.5	<9.8	2.9	not requested	166	11.2	1.5	5.7	75.51	15.5	6.4	319	0.3	35	19
MW-27	Up Gradient of BSW-5	25	11/2/2017	**323**	3.5	not requested	not requested	not requested	not requested	not requested	not requested	7.60	74.57	26.4	6.0	181	1.1	-24	2.2
			3/14/2018	<56.8	4.0	not detected	**	not requested	35	8.7	1.8	6.29	75.91	17.5	5.1	140	0.4	81	10.6
			6/26/2018	<24.5	3.5	<9.8	2.9	not requested	32.9	7.6	1.5	7.07	75.13	22.1	5.1	140	0.4	20	6.7
			9/19/2018	<25.5	3.6	<10.2	3.0	not requested	22.4	6.9	1.7	5.49	75.91	24.6	5.2	116	0.6	-9	8.8
			2/20/2019	<25.0	3.5	<10.0	2.9	**2.0**	24.9	7.6	1.9	6.16	76.04	14.2	5.5	107	0.5	144	8.9
MW-28	Up Gradient of BSW-3	30	11/3/2017	**351**	3.5	not requested	not requested	not requested	not requested	not requested	not requested	7.95	75.03	23.9	5.7	153	1.1	-50	0.3
			3/14/2018	**262**	3.5	not detected	**	not requested	13.8	8.1	1.5	6.31	76.72	14.3	5.0	95	0.4	246	0.3
			6/27/2018	**128**	6.9	<9.8	2.9	not requested	12.6	7.9	1.5	7.39	75.64	22.5	4.2	110	0.3	131	3.4
			9/20/2018	**252**	18.7	<10.6	3.1	not requested	13.7	7.6	1.7	5.29	76.72	25.5	4.9	116	0.3	220	5.5
			2/21/2019	**151**	17.3	<9.8	2.9	not requested	15.5	8.4	2.1	6.46	76.57	15.7	5.2	109	0.4	203	5.0
MW-29	Up Gradient of BSW-8	90	11/3/2017	**51.7**	3.5	not requested	not requested	not requested	not requested	not requested	not requested	7.76	75.15	27.1	7.0	487	0.5	-141	4.6
			3/14/2018	<51	3.6	not detected	**	not requested	220	6.1	1.4	6.23	76.67	17.3	6.5	383	0.1	55	6.3
			9/20/2018	**41.4**	3.5	<10.0	2.9	not requested	228	5.6	1.4	5.29	76.67	24.0	6.5	435	0.2	134	13.8
			2/21/2019	<24.5	3.5	<9.8	2.9	not requested	160	5.8	1.4	6.11	76.79	19.5	6.5	309	0.2	142	15.6
MW-30	Cross Gradient of BSW-8	38	11/3/2017	<25	3.5	not requested	not requested	not requested	not requested	not requested	not requested	6.25	75.13	29.2	7.1	740	0.5	-156	8.2
			3/13/2018	<52.1	3.7	not detected	**	not requested	340	19.7	3.6	5.06	76.52	16.4	6.5	723	0.3	-47	47.8
			6/27/2018	<24.5	3.5	<9.8	2.9	not requested	346	19.8	3.3	5.98	75.60	21.9	6.5	749	0.2	-45	24.5
			9/20/2018	<25.0	3.5	<10.0	2.9	not requested	325	16.9	3.8	4.51	76.52	25.7	6.7	691	0.2	-83	24.6
			2/19/2019	<25.0	3.5	<10.0	2.9	**2.4**	295	18.8	2.8	4.98	76.60	14.4	7.0	603	0.2	-43	39.5
RSL - Tapwater				0.041		240		0.041	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Maximum Contaminant Level (MCL)				1		no standard		1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

J =concentration shown is estimated
Bold value indicates a detection above the method reporting detection limit (MDL)
Yellow shaded cell indicates detected concentration is greater than the corresponding MCL
** Not detected as a Tentatively Identified Compound (TIC) by the analytical laboroatory

TABLE 3
Surface Water Analytical Data Summary
Marsh Lumber Company
Pamplico, South Carolina
S&ME Project No. 1584-98-146C

Sample Location	Date Collected	Method 8270 Acid Extractables	
		Pentachlorophenol	Remaining Target Compounds
SW-1	12/19/2005	<20	BQL
	7/22/2006	<20	BQL
*	8/22/2006	<20	BQL
	1/24/2007	<20	BQL
	10/3/2007	<20	BQL
	7/24/2008	<20	BQL
	1/8/2009	<20	BQL
	1/7/2010	<20	BQL
	6/24/2010	<20	BQL
	5/25/2011	<50	BQL
	5/16/2013	<50	BQL
	6/20/2013	<20	BQL
	2/5/2016	<20	BQL
	2/21/2017	<25	BQL
	3/14/2018	<49	BQL
	2/18/2019	<24.5	BQL
SW-2	12/19/2005	<20	BQL
	7/22/2006	**2.3 J**	BQL
*	8/22/2006	<20	BQL
	1/24/2007	<20	BQL
	10/3/2007	<20	BQL
	7/24/2008	<20	BQL
	1/8/2009	<20	BQL
	1/7/2010	<20	BQL
	6/24/2010	<20	BQL
	5/25/2011	<50	BQL
	5/16/2013	<50	BQL
	6/20/2013	<20	BQL
	2/5/2016	<20	BQL
	2/21/2017	<25	BQL
	3/14/2018	<49	BQL
	2/18/2019	<24.8	BQL
SW-3	12/19/2005	<20	BQL
	7/22/2006	**3.3 J**	BQL
*	8/22/2006	<20	BQL
	1/24/2007	<20	BQL
	10/3/2007	<20	BQL
	7/24/2008	<20	BQL
	1/8/2009	<20	BQL
	1/7/2010	<20	BQL
	6/24/2010	<50	BQL
	5/25/2011	<50	BQL
	5/16/2013	**10 J**	BQL
	6/20/2013	<20	BQL
	2/5/2016	<20	BQL
	2/21/2017	< 25	BQL
	3/14/2018	<51	BQL
	2/18/2019	<24.5	BQL
SW-4	6/20/2013	<20	BQL
	2/5/2016	<20	BQL
	2/21/2017	<25	BQL
	3/14/2018	<49	BQL
	2/18/2019	<24.5	BQL

BQL = Below Quantitation Limit or Method Detection Limit
all concentrations reported in micrograms per liter (ug/l)
* Confirmation sampling event. Samples analyzed by PACE Analytical (R&A the prior subcontract laboratory)

Appendices

Appendix I – Field Sampling Forms

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 18, 2019
Source Well:	MW-3A	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 18, 2019
Sampled By:	Gary Simcox	Sample Time:	16:55
Weather:	Sunny	Air Temp:	60° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		11.35	ft-TOC	
Total Well Depth:		19.60	ft-TOC	
Height of Water Column:		8.25	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.3	Gal
3 * Well Volume	4.04	Gal
5 * Well Volume	6.73	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	16:05	End Time:	16:50
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		4.65		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		12.51		ft-TOC	**Comments:**		
Final Volume Purged:		1.2		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	16:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	16:10	0.1	100		18.4	5.9	342	0.8	77	114	
	16:15	0.3	100		18.3	5.4	201	0.7	154	103	
	16:20	0.4	100		18.4	5.4	163	0.6	177	92.1	
	16:25	0.5	100		18.5	5.4	142	0.6	194	75.6	
	16:30	0.7	100		18.5	5.4	130	0.6	206	68.7	
	16:35	0.8	100		18.4	5.4	130	0.6	221	55.4	
	16:40	0.9	100		18.4	5.4	130	0.5	228	56.6	
	16:45	1.1	100		18.3	5.4	130	0.5	238	52.4	
	16:50	1.2	100		18.3	5.4	130	0.5	243	48.3	
Final:	16:50	1.2	100		18.3	5.4	130	0.5	243	48.3	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 16:55 Sample End Time: 17:15

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 19, 2019
Source Well:	MW-10	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 19, 2019
Sampled By:	Gary Simcox	Sample Time:	14:00
Weather:	Rain	Air Temp:	45° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			8.07	ft-TOC
Total Well Depth:			17.80	ft-TOC
Height of Water Column:			9.73	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.76	Gal
5 * Well Volume	7.94	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:20	End Time:	13:55
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		7.93		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		10.05		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:25	0.1	100		13.9	6.5	377	0.4	77	9.05	
	13:30	0.3	100		14.7	6.4	326	0.3	101	7.10	
	13:35	0.4	100		14.9	6.4	322	0.2	106	5.64	
	13:40	0.5	100		14.9	6.3	318	0.2	109	4.93	
	13:45	0.7	100		14.8	6.3	315	0.3	116	3.83	
	13:50	0.8	100		14.7	6.3	314	0.2	119	3.22	
	13:55	0.9	100		14.8	6.3	313	0.2	113	4.00	
Final:	13:55	0.9	100		14.8	6.3	313	0.2	113	4.0	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 14:00 Sample End Time: 14:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	September 20, 2018
Source Well:	MW-13A	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 21, 2019
Sampled By:	Gary Simcox	Sample Time:	16:00
Weather:	Sunny	Air Temp:	70° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		6.75	ft-TOC	
Total Well Depth:		26.20	ft-TOC	
Height of Water Column:		19.45	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	3.2	Gal
3 * Well Volume	9.52	Gal
5 * Well Volume	15.87	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	15:05	End Time:	15:55
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		9.25		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.06		ft-TOC	**Comments:**		
Final Volume Purged:		1.3		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:10	0.1	100		19.3	6.8	771	0.3	-70	68.1	
	15:15	0.3	100		19.3	6.8	775	0.2	-80	52.5	
	15:20	0.4	100		19.4	6.9	774	0.2	-89	46.8	
	15:25	0.5	100		19.4	6.9	774	0.2	-95	45.2	
	15:30	0.7	100		19.6	7.0	773	0.2	-96	41.1	
	15:35	0.8	100		19.4	7.0	774	0.2	-98	40.4	
	15:40	0.9	100		19.5	7.0	774	0.2	-99	36.8	
	15:45	1.1	100		19.5	7.0	773	0.2	-101	31.1	
	15:50	1.2	100		19.6	7.1	774	0.1	-102	27.7	
	15:55	1.3	100		19.8	7.0	774	0.1	-103	23.9	
Final:	15:55	1.3	100		19.8	7.0	774	0.1	-103	23.9	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 16:00 Sample End Time: 16:35

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 20, 2019
Source Well:	MW-14A	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 20, 2019
Sampled By:	Gary Simcox	Sample Time:	10:35
Weather:	Light Rain	Air Temp:	40° F

Water Level & Well Data

Measuring Point:	Top of Casing			
Depth to Water:	4.59	ft-TOC		
Total Well Depth:	19.30	ft-TOC		
Height of Water Column:	14.71	feet		
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.4	Gal
3 * Well Volume	7.20	Gal
5 * Well Volume	12.00	Gal

Well Purging Information

Purge Method:	Peristaltic Pump	Start Time:	9:30	End Time:	10:30	
(If Used) Bladder Pump Control Settings:	On (sec):	Off (sec):		Pressure:		psi
Pump Intake Depth from Top of Casing:	18.0	ft-TOC				
Water Column Above Pump Intake:	13.41	feet	Flow Through Cell Vol:	200	mL	
DTW-TOC at 25% Drawdown of WC Above Pump:	7.94	ft-TOC	**Comments:**			
Final Volume Purged:	1.6	Gallons	Used YSI Pro Plus,			
Final Volume Purge Rate:	100	mL/min				
Well Purged Dry?:	No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:35	0.1	100		12.0	6.1	107	8.8	252	18.4	
	09:40	0.3	100		13.1	6.2	106	8.6	283	16.5	
	09:45	0.4	100		13.3	6.2	106	8.4	295	15.4	
	09:50	0.5	100		13.4	6.2	108	8.4	301	9.04	
	10:15	1.2	100		11.7	6.0	107	9.9	338	7.75	
	10:20	1.3	100		13.4	6.2	109	8.7	332	8.78	
	10:25	1.5	100		13.5	6.2	109	8.4	336	9.07	
	10:30	1.6	100		13.4	6.2	111	8.3	337	8.90	
Final:	10:30	1.6	100		13.4	6.2	111	8.3	337	8.9	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 10:35 Sample End Time: 11:35

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

	Name	Signature	Date
(1)			

Notes: The battery died in the flow thru cell at 0950 hours. I turned off the pump, purchased new batteries and restarted the pump at 1010 hours.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 20, 2019
Source Well:	MW-15	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 20, 2019
Sampled By:	Gary Simcox	Sample Time:	12:40
Weather:	Light Rain	Air Temp:	41° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		8.89	ft-TOC	
Total Well Depth:		19.00	ft-TOC	
Height of Water Column:		10.11	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.6	Gal
3 * Well Volume	4.95	Gal
5 * Well Volume	8.25	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	12:00	End Time:	12:35
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		7.11		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		10.67		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	12:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	12:05	0.1	100		11.6	5.9	414	1.1	94	105	
	12:10	0.3	100		13.1	6.4	607	0.4	-18	33.9	
	12:15	0.4	100		13.4	6.4	679	0.3	-27	21.9	
	12:20	0.5	100		13.8	6.4	687	0.3	-33	17.1	
	12:25	0.7	100		13.7	6.4	696	0.3	-36	17.1	
	12:30	0.8	100		13.9	6.4	703	0.3	-39	11.9	
	12:35	0.9	100		13.6	6.4	713	0.2	-40	10.4	
Final:	12:35	0.9	100		13.6	6.4	713	0.2	-40	10.4	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 12:40 Sample End Time: 13:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 19, 2019
Source Well:	MW-16	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 19, 2019
Sampled By:	Gary Simcox	Sample Time:	8:05
Weather:	Overcast	Air Temp:	45° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			8.22	ft-TOC
Total Well Depth:			19.00	ft-TOC
Height of Water Column:			10.78	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.8	Gal
3 * Well Volume	5.28	Gal
5 * Well Volume	8.80	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	7:30	End Time:	8:00
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		7.78		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		10.17		ft-TOC	**Comments:**		
Final Volume Purged:		0.8		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	07:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	07:35	0.1	100		14.4	6.5	293	1.7	295	65.0	
	07:40	0.3	100		14.8	6.7	355	1.3	290	55.6	
	07:45	0.4	100		15.1	6.6	355	1.2	290	57.1	
	07:50	0.5	100		14.8	6.7	355	1.2	290	56.6	
	07:55	0.7	100		14.8	6.7	354	1.1	291	57.0	
	08:00	0.8	100		14.9	6.6	353	1.1	292	55.2	
Final:	08:00	0.8	100		14.9	6.6	353	1.1	292	55.2	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 08:05 Sample End Time: 08:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 19, 2019
Source Well:	MW-18B	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 19, 2019
Sampled By:	Gary Simcox	Sample Time:	12:05
Weather:	Light Rain	Air Temp:	45° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		6.73	ft-TOC	
Total Well Depth:		19.60	ft-TOC	
Height of Water Column:		12.87	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.1	Gal
3 * Well Volume	6.30	Gal
5 * Well Volume	10.50	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	11:15	End Time:	12:00
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		9.27		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.05		ft-TOC	**Comments:**		
Final Volume Purged:		1.2		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:15	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:20	0.1	100		12.6	7.0	707	2.6	-40	106	
	11:25	0.3	100		12.7	7.1	704	2.5	2	77.6	
	11:30	0.4	100		12.9	7.1	705	2.2	17	42.2	
	11:35	0.5	100		13.0	7.1	705	2.1	21	38.0	
	11:40	0.7	100		13.1	7.1	705	1.8	19	23.1	
	11:45	0.8	100		13.0	7.1	705	1.7	11	20.5	
	11:50	0.9	100		13.1	7.0	704	1.5	7	15.7	
	11:55	1.1	100		13.1	7.1	706	1.4	2	13.4	
	12:00	1.2	100		13.2	7.1	704	1.4	2	8.73	
Final:	12:00	1.2	100		13.2	7.1	704	1.4	2	8.7	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 12:05 Sample End Time: 12:55

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 19, 2019
Source Well:	MW-19	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 19, 2019
Sampled By:	Gary Simcox	Sample Time:	9:45
Weather:	Light Rain	Air Temp:	45° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			5.46	ft-TOC
Total Well Depth:			20.40	ft-TOC
Height of Water Column:			14.94	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.4	Gal
3 * Well Volume	7.31	Gal
5 * Well Volume	12.19	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	9:05	End Time:	9:40
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		10.54		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		8.10		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:10	0.1	100		15.8	6.4	615	0.6	-26	15.9	
	09:15	0.3	100		15.9	6.5	675	0.5	-37	8.10	
	09:20	0.4	100		15.6	6.5	695	0.4	-45	11.8	
	09:25	0.5	100		16.0	6.5	703	0.3	-51	18.6	
	09:30	0.7	100		16.1	6.5	714	0.3	-55	19.3	
	09:35	0.8	100		16.2	6.5	736	0.3	-59	20.7	
	09:40	0.9	100		16.2	6.5	750	0.3	-61	19.4	
Final:	09:40	0.9	100		16.2	6.5	750	0.3	-61	19.4	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 09:45 Sample End Time: 10:30

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 20, 2019
Source Well:	MW-20	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 20, 2019
Sampled By:	Gary Simcox	Sample Time:	14:40
Weather:	Overcast	Air Temp:	42° F

Water Level & Well Data

Measuring Point:	Top of Casing		
Depth to Water:	6.87	ft-TOC	
Total Well Depth:	17.00	ft-TOC	
Height of Water Column:	10.13	feet	
Screen Length:	feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.7	Gal
3 * Well Volume	4.96	Gal
5 * Well Volume	8.27	Gal

Well Purging Information

Purge Method:	Peristaltic Pump	Start Time:	14:00	End Time:	14:35	
(If Used) Bladder Pump Control Settings:	On (sec):	Off (sec):		Pressure:		psi
Pump Intake Depth from Top of Casing:	16.0	ft-TOC				
Water Column Above Pump Intake:	9.13	feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:	9.15	ft-TOC	**Comments:**			
Final Volume Purged:	0.9	Gallons	Used YSI Pro Plus,			
Final Volume Purge Rate:	100	mL/min				
Well Purged Dry?:	No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	14:00	0.0	---	---	---	---	---	---	---	---	Start Purging
	14:05	0.1	100		14.1	7.3	384	0.3	-78	31.5	
	14:10	0.3	100		14.3	7.4	377	0.2	-86	22.7	
	14:15	0.4	100		14.0	7.4	377	0.2	-91	18.9	
	14:20	0.5	100		14.4	7.4	376	0.2	-94	17.3	
	14:25	0.7	100		14.5	7.4	377	0.2	-96	14.1	
	14:30	0.8	100		14.3	7.3	377	0.2	-97	8.68	
	14:35	0.9	100		14.5	7.3	377	0.2	-98	7.38	
Final:	14:35	0.9	100		14.5	7.3	377	0.2	-98	7.4	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 14:40 Sample End Time: 15:05

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 21, 2019
Source Well:	MW-21	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 21, 2019
Sampled By:	Gary Simcox	Sample Time:	12:00
Weather:	Overcast	Air Temp:	50° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			7.20	ft-TOC
Total Well Depth:			19.10	ft-TOC
Height of Water Column:			11.90	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.9	Gal
3 * Well Volume	5.83	Gal
5 * Well Volume	9.71	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	11:20	End Time:	11:55
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		18.0		ft-TOC			
Water Column Above Pump Intake:		10.80		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.90		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:20	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:25	0.1	100		16.4	6.1	142	1.0	263	31.7	
	11:30	0.3	100		16.6	6.1	150	0.8	260	27.7	
	11:35	0.4	100		16.6	6.2	152	0.7	259	27.7	
	11:40	0.5	100		16.6	6.1	152	0.7	259	31.2	
	11:45	0.7	100		16.6	6.1	150	0.6	258	25.5	
	11:50	0.8	100		16.6	6.1	148	0.6	257	26.9	
	11:55	0.9	100		16.5	6.1	148	0.6	255	26.3	
Final:	11:55	0.9	100		16.5	6.1	148	0.6	255	26.3	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 12:00 Sample End Time: 12:35

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 18, 2019
Source Well:	MW-22	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 18, 2019
Sampled By:	Gary Simcox	Sample Time:	12:05
Weather:	Overcast	Air Temp:	50° F

Water Level & Well Data

Measuring Point:	Top of Casing		
Depth to Water:	5.67	ft-TOC	
Total Well Depth:	20.40	ft-TOC	
Height of Water Column:	14.73	feet	
Screen Length:		feet Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	2.4	Gal
3 * Well Volume	7.21	Gal
5 * Well Volume	12.02	Gal

Well Purging Information

Purge Method:	Peristaltic Pump	Start Time:	11:30	End Time:	12:00	
(If Used) Bladder Pump Control Settings:	On (sec):	Off (sec):		Pressure:		psi
Pump Intake Depth from Top of Casing:	18.0	ft-TOC				
Water Column Above Pump Intake:	12.33	feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:	8.75	ft-TOC	**Comments:**			
Final Volume Purged:	0.8	Gallons	Used YSI Pro Plus,			
Final Volume Purge Rate:	100	mL/min				
Well Purged Dry?:	No	(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	11:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	11:35	0.1	100		16.3	5.6	199	0.4	100	0.38	
	11:40	0.3	100		16.2	5.5	136	0.4	134	0.25	
	11:45	0.4	100		16.3	5.4	125	0.4	156	0.17	
	11:50	0.5	100		16.4	5.4	126	0.4	172	0.13	
	11:55	0.7	100		16.4	5.4	127	0.4	185	0.09	
	12:00	0.8	100		16.5	5.5	131	0.3	190	0.10	
Final:	12:00	0.8	100		16.5	5.5	131	0.3	190	0.1	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 12:05 Sample End Time: 13:05

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 18, 2019
Source Well:	MW-23	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 18, 2019
Sampled By:	Gary Simcox	Sample Time:	14:25
Weather:	Sunny	Air Temp:	50° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			7.39	ft-TOC
Total Well Depth:			15.60	ft-TOC
Height of Water Column:			8.21	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.3	Gal
3 * Well Volume	4.02	Gal
5 * Well Volume	6.70	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:45	End Time:	14:20
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		18.0		ft-TOC			
Water Column Above Pump Intake:		10.61		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		10.04		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:45	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:50	0.1	100		16.5	6.5	706	0.5	-22	119	
	13:55	0.3	100		16.5	6.6	861	0.4	-57	86.0	
	14:00	0.4	100		16.6	6.6	959	0.4	-71	68.0	
	14:05	0.5	100		16.6	6.7	1,003	0.4	-77	48.0	
	14:10	0.7	100		16.6	6.6	1,087	0.3	-82	41.6	
	14:15	0.8	100		16.6	6.7	1,122	0.3	-85	33.5	
	14:20	0.9	100		16.6	6.6	1,148	0.3	-87	24.7	
Final:	14:20	0.9	100		16.6	6.6	1,148	0.3	-87	24.7	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 14:25 Sample End Time: 15:25

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 18, 2019
Source Well:	MW-24	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 18, 2019
Sampled By:	Gary Simcox	Sample Time:	10:20
Weather:	Overcast	Air Temp:	50° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		5.58	ft-TOC	
Total Well Depth:		16.70	ft-TOC	
Height of Water Column:		11.12	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	2	inch
Water Volume	1.8	Gal
3 * Well Volume	5.44	Gal
5 * Well Volume	9.07	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	9:40	End Time:	10:15
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		18.0		ft-TOC			
Water Column Above Pump Intake:		12.42		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		8.69		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:40	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:45	0.1	100		15.4	7.0	1,999	0.6	-136	31.5	
	09:50	0.3	100		15.7	7.0	2,033	0.5	-144	40.0	
	09:55	0.4	100		15.8	7.0	2,034	0.5	-148	45.1	
	10:00	0.5	100		15.8	7.0	2,036	0.5	-149	47.0	
	10:05	0.7	100		15.7	7.0	2,038	0.4	-151	40.9	
	10:10	0.8	100		15.8	7.0	2,037	0.4	-153	39.7	
	10:15	0.9	100		15.8	7.0	2,037	0.4	-155	38.7	
Final:	10:15	0.9	100		15.8	7.0	2,037	0.4	-155	38.7	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 10:20 Sample End Time: 11:10

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: When filling the VOA's, the water reacted with the preservative and caused a lot of air bubbles. Probably because of the very high conductivity.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 20, 2019
Source Well:	MW-25	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 20, 2019
Sampled By:	Gary Simcox	Sample Time:	16:40
Weather:	Light Rain	Air Temp:	44° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		5.01		ft-TOC
Total Well Depth:		17.10		ft-TOC
Height of Water Column:		12.09		feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.5	Gal
3 * Well Volume	1.48	Gal
5 * Well Volume	2.47	Gal

Well Purging Information

Purge Method:	Peristaltic Pump		Start Time:	15:35	End Time:	16:35	
(If Used) Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:		psi
Pump Intake Depth from Top of Casing:	16.0		ft-TOC				
Water Column Above Pump Intake:	10.99		feet	Flow Through Cell Vol:		200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:	7.76		ft-TOC	**Comments:**			
Final Volume Purged:	1.6		Gallons	Used YSI Pro Plus,			
Final Volume Purge Rate:	100		mL/min				
Well Purged Dry?:	No		(Yes/No)				

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:35	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:40	0.1	100		13.0	6.3	277	0.4	-3	425	
	15:45	0.3	100		12.6	6.2	265	0.3	6	292	
	15:50	0.4	100		12.7	6.2	259	0.3	11	224	
	15:55	0.5	100		13.2	6.2	249	0.3	11	141	
	16:00	0.7	100		13.1	6.1	231	0.2	25	77.3	
	16:05	0.8	100		13.4	6.1	226	0.2	22	61.5	
	16:10	0.9	100		13.2	6.1	217	0.2	27	53.4	
	16:15	1.1	100		13.4	6.0	217	0.2	26	41.0	
	16:20	1.2	100		13.7	6.1	209	0.2	29	32.9	
	16:25	1.3	100		13.5	6.0	208	0.2	29	25.0	
	16:30	1.5	100		13.3	6.0	212	0.2	31	13.9	
	16:35	1.6	100		13.5	6.0	208	0.2	31	12.0	
Final:	16:35	1.6	100		13.5	6.0	208	0.2	31	12.0	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 16:40 Sample End Time: 17:10

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	1	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 21, 2019
Source Well:	MW-26	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 21, 2019
Sampled By:	Gary Simcox	Sample Time:	8:35
Weather:	Overcast	Air Temp:	45° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		5.70	ft-TOC	
Total Well Depth:		17.10	ft-TOC	
Height of Water Column:		11.40	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.5	Gal
3 * Well Volume	1.40	Gal
5 * Well Volume	2.33	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	7:30	End Time:	8:30
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		16.0		ft-TOC			
Water Column Above Pump Intake:		10.30		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		8.28		ft-TOC	**Comments:**		
Final Volume Purged:		1.6		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	07:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	07:35	0.1	100		15.2	6.7	343	1.3	56	125	
	07:40	0.3	100		15.8	6.7	349	0.8	59	141	
	07:45	0.4	100		15.9	6.7	349	0.6	55	113	
	07:50	0.5	100		15.8	6.6	346	0.5	49	110	
	07:55	0.7	100		15.2	6.6	343	0.7	54	95.2	
	08:00	0.8	100		15.5	6.6	337	0.5	53	73.8	
	08:05	0.9	100		15.5	6.5	335	0.5	51	61.9	
	08:10	1.1	100		16.0	6.5	329	0.4	47	53.8	
	08:15	1.2	100		16.1	6.5	326	0.4	41	40.5	
	08:20	1.3	100		15.5	6.5	323	0.3	37	27.7	
	08:25	1.5	100		15.5	6.4	322	0.3	36	24.3	
	08:30	1.6	100		15.5	6.4	319	0.3	35	19.0	
Final:	08:30	1.6	100		15.5	6.4	319	0.3	35	19.0	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 08:35 Sample End Time: 09:10

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 20, 2019
Source Well:	MW-27	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 20, 2019
Sampled By:	Gary Simcox	Sample Time:	8:10
Weather:	Rain	Air Temp:	37° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		6.16	ft-TOC	
Total Well Depth:		20.10	ft-TOC	
Height of Water Column:		13.94	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.6	Gal
3 * Well Volume	1.71	Gal
5 * Well Volume	2.84	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	7:30	End Time:	8:05
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		18.0		ft-TOC			
Water Column Above Pump Intake:		11.84		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.12		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	07:30	0.0	---	---	---	---	---	---	---	---	Start Purging
	07:35	0.1	100		12.4	6.1	198	0.8	110	122	
	07:40	0.3	100		13.9	5.8	143	0.6	136	52.4	
	07:45	0.4	100		14.1	5.7	121	0.5	138	30.4	
	07:50	0.5	100		14.4	5.6	110	0.5	143	13.7	
	07:55	0.7	100		14.4	5.6	109	0.5	143	9.26	
	08:00	0.8	100		14.1	5.6	108	0.5	142	9.46	
	08:05	0.9	100		14.2	5.5	107	0.5	144	8.91	
Final:	08:05	0.9	100		14.2	5.5	107	0.5	144	8.9	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 08:10 Sample End Time: 09:00

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: Duplicate taken at this location.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 21, 2019
Source Well:	MW-28	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 21, 2019
Sampled By:	Gary Simcox	Sample Time:	10:20
Weather:	Overcast	Air Temp:	50° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			6.46	ft-TOC
Total Well Depth:			20.20	ft-TOC
Height of Water Column:			13.74	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.6	Gal
3 * Well Volume	1.68	Gal
5 * Well Volume	2.80	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	9:40	End Time:	10:15
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		18.0		ft-TOC			
Water Column Above Pump Intake:		11.54		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.35		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	09:40	0.0	---	---	---	---	---	---	---	---	Start Purging
	09:45	0.1	100		14.7	5.6	184	1.1	103	179	
	09:50	0.3	100		15.3	5.4	140	0.8	146	28.5	
	09:55	0.4	100		15.3	5.3	115	0.6	170	7.76	
	10:00	0.5	100		15.4	5.2	111	0.4	188	3.91	
	10:05	0.7	100		15.6	5.2	109	0.4	194	2.73	
	10:10	0.8	100		15.7	5.2	110	0.4	199	4.21	
	10:15	0.9	100		15.7	5.2	109	0.4	203	4.96	
Final:	10:15	0.9	100		15.7	5.2	109	0.4	203	5.0	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 10:20 Sample End Time: 10:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 21, 2019
Source Well:	MW-29	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 21, 2019
Sampled By:	Gary Simcox	Sample Time:	14:10
Weather:	Sunny	Air Temp:	70° F

Water Level & Well Data

Measuring Point:		Top of Casing		
Depth to Water:		6.11	ft-TOC	
Total Well Depth:		23.30	ft-TOC	
Height of Water Column:		17.19	feet	
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.7	Gal
3 * Well Volume	2.10	Gal
5 * Well Volume	3.51	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	13:05	End Time:	14:05
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		20.0		ft-TOC			
Water Column Above Pump Intake:		13.89		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		9.58		ft-TOC	**Comments:**		
Final Volume Purged:		1.6		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:				(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	13:05	0.0	---	---	---	---	---	---	---	---	Start Purging
	13:10	0.1	100		17.9	5.5	141	0.5	277	15.5	
	13:15	0.3	100		18.2	5.5	150	0.3	272	27.7	
	13:20	0.4	100		18.4	5.6	158	0.3	262	45.4	
	13:25	0.5	100		18.9	6.2	280	0.2	230	194	
	13:30	0.7	100		18.4	5.9	235	0.3	217	69.6	
	13:35	0.8	100		18.9	6.3	287	0.2	200	109	
	13:40	0.9	100		19.3	6.4	297	0.2	184	74.1	
	13:45	1.1	100		19.2	6.4	290	0.2	174	51.3	
	13:50	1.2	100		19.2	6.4	298	0.2	163	35.9	
	13:55	1.3	100		19.4	6.6	300	0.2	150	23.9	
	14:00	1.5	100		19.4	6.6	311	0.2	145	17.1	
	14:05	1.6	100		19.5	6.5	309	0.2	142	15.6	
Final:	14:05	1.6	100		19.5	6.5	309	0.2	142	15.6	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 14:10 Sample End Time: 14:40

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

LOW FLOW GROUNDWATER SAMPLING FORM

Project Name:	Marsh Pamplico		
Project Location:			
Project Number:	1584-98-146C	Purge Date:	February 19, 2019
Source Well:	MW-30	Purge Time:	Minutes
Locked?:	Yes	Sample Date:	February 19, 2019
Sampled By:	Gary Simcox	Sample Time:	15:50
Weather:	Rain	Air Temp:	45° F

Water Level & Well Data

Measuring Point:			Top of Casing	
Depth to Water:			4.98	ft-TOC
Total Well Depth:			22.40	ft-TOC
Height of Water Column:			17.42	feet
Screen Length:		feet	Stickup:	ft-GRD

Well Volume		
Well Diameter	1	inch
Water Volume	0.7	Gal
3 * Well Volume	2.13	Gal
5 * Well Volume	3.55	Gal

Well Purging Information

Purge Method:		Peristaltic Pump		Start Time:	15:10	End Time:	15:45
(If Used)	Bladder Pump Control Settings:	On (sec):		Off (sec):		Pressure:	psi
Pump Intake Depth from Top of Casing:		20.0		ft-TOC			
Water Column Above Pump Intake:		15.02		feet	Flow Through Cell Vol:	200	mL
DTW-TOC at 25% Drawdown of WC Above Pump:		8.74		ft-TOC	**Comments:**		
Final Volume Purged:		0.9		Gallons	Used YSI Pro Plus,		
Final Volume Purge Rate:		100		mL/min			
Well Purged Dry?:		No		(Yes/No)			

Field Parameters (Taken at time intervals ≥ 5 minutes and purge volumes ≥ 1 flow-through cell volume)

	Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment
	15:10	0.0	---	---	---	---	---	---	---	---	Start Purging
	15:15	0.1	100		14.4	6.9	530	0.5	68	126	
	15:20	0.3	100		14.4	7.0	591	0.3	-1	106	
	15:25	0.4	100		14.1	7.0	598	0.3	-21	93.3	
	15:30	0.5	100		14.1	7.0	599	0.3	-30	76.6	
	15:35	0.7	100		14.2	6.9	600	0.3	-35	60.3	
	15:40	0.8	100		14.3	7.0	605	0.2	-42	42.5	
	15:45	0.9	100		14.4	7.0	603	0.2	-43	39.5	
Final:	15:45	0.9	100		14.4	7.0	603	0.2	-43	39.5	End of Purging

Sample Method: Peristaltic Pump Sample Start Time: 15:50 Sample End Time: 16:50

Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
SVOCs 8270	2	1L A	Unpreserved				
TOC	3	40mL VOAs	Phosphoric				
Alkalinity/Chloride	2	250mL P	Unpreserved				
PCS 8151	2	1L A	Unpreserved				

Name	Signature	Date
(1)		

Notes: To convert ORP to Eh, add 205 mV to ORP.

Form Revision Date: 2/12/18 16:00

Appendix II – Laboratory Analytical Report

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 01, 2019

Mr. Ed Henriques
S&ME, Inc.
8646 West Market Street
Suite 105
Greensboro, NC 27409

RE: Project: Marsh Lumber
Pace Project No.: 92418293

Dear Mr. Henriques:
Enclosed are the analytical results for sample(s) received by the laboratory between February 19, 2019 and February 21, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Trey Carter
trey.carter@pacelabs.com
(704)875-9092
Project Manager

Enclosures

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Marsh Lumber
Pace Project No.: 92418293

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Marsh Lumber
Pace Project No.: 92418293

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92418293001	**SW-1**	Water	02/18/19 12:02	02/19/19 10:57
92418293002	**SW-2**	Water	02/18/19 12:42	02/19/19 10:57
92418293003	**SW-3**	Water	02/18/19 12:52	02/19/19 10:57
92418293004	**SW-4**	Water	02/18/19 12:23	02/19/19 10:57
92418293005	**MW-22**	Water	02/18/19 12:05	02/19/19 10:57
92418293006	**MW-23**	Water	02/18/19 14:25	02/19/19 10:57
92418293007	**MW-24**	Water	02/18/19 10:20	02/19/19 10:57
92418293008	**MW-18B**	Water	02/19/19 12:05	02/20/19 12:00
92418293009	**MW-19**	Water	02/19/19 19:45	02/20/19 12:00
92418293010	**MW-30**	Water	02/19/19 15:50	02/20/19 12:00
92418293011	**MW-14A**	Water	02/20/19 11:35	02/21/19 09:15
92418293012	**MW-15**	Water	02/20/19 12:40	02/21/19 09:15
92418293013	**MW-27**	Water	02/20/19 08:10	02/21/19 09:15

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Marsh Lumber
Pace Project No.: 92418293

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92418293001	**SW-1**	EPA 8270D	BPJ	82	PASI-C
92418293002	**SW-2**	EPA 8270D	BPJ	82	PASI-C
92418293003	**SW-3**	EPA 8270D	BPJ	82	PASI-C
92418293004	**SW-4**	EPA 8270D	BPJ	82	PASI-C
92418293005	**MW-22**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418293006	**MW-23**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418293007	**MW-24**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Marsh Lumber
Pace Project No.: 92418293

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Organic
Client: S&ME - Greensboro
Date: March 01, 2019

General Information:
7 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 459960

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2506312)
  - Atrazine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 459960

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418293001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2506313)
  - Atrazine

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Marsh Lumber
Pace Project No.: 92418293

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Organic
Client: S&ME - Greensboro
Date: March 01, 2019

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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PROJECT NARRATIVE

Project: Marsh Lumber
Pace Project No.: 92418293

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: S&ME - Greensboro
Date: March 01, 2019

General Information:
3 samples were analyzed for SM 2320B-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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PROJECT NARRATIVE

Project: Marsh Lumber
Pace Project No.: 92418293

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: S&ME - Greensboro
Date: March 01, 2019

General Information:
3 samples were analyzed for SM 4500-Cl-E-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 459474

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418603001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 2503900)
  - Chloride
- MSD (Lab ID: 2503901)
  - Chloride

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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PROJECT NARRATIVE

Project: Marsh Lumber
Pace Project No.: 92418293

Method: **SM 5310B-2011**
Description: 5310B TOC
Client: S&ME - Greensboro
Date: March 01, 2019

General Information:
3 samples were analyzed for SM 5310B-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-1 **Lab ID: 92418293001** Collected: 02/18/19 12:02 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 11:38	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 11:38	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 11:38	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 11:38	1912-24-9	L2,M0
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 11:38	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 11:38	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 11:38	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 11:38	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 11:38	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 11:38	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 11:38	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 11:38	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 11:38	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 11:38	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 11:38	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 11:38	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 11:38	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 11:38	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 11:38	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 11:38	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 11:38	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 11:38	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 11:38	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 11:38	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 11:38	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 11:38	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
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ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-1 **Lab ID: 92418293001** Collected: 02/18/19 12:02 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 11:38	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 11:38	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 11:38	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 11:38	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 11:38	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 11:38	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 11:38	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 11:38	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 11:38	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 11:38	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 11:38	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 11:38	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 11:38	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 11:38	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 11:38	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 11:38	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 11:38	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	47	%	21-110		1	02/25/19 14:20	02/26/19 11:38	4165-60-0	
2-Fluorobiphenyl (S)	41	%	27-110		1	02/25/19 14:20	02/26/19 11:38	321-60-8	
Terphenyl-d14 (S)	37	%	31-107		1	02/25/19 14:20	02/26/19 11:38	1718-51-0	
Phenol-d6 (S)	20	%	10-110		1	02/25/19 14:20	02/26/19 11:38	13127-88-3	
2-Fluorophenol (S)	27	%	12-110		1	02/25/19 14:20	02/26/19 11:38	367-12-4	
2,4,6-Tribromophenol (S)	55	%	27-110		1	02/25/19 14:20	02/26/19 11:38	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-2 **Lab ID: 92418293002** Collected: 02/18/19 12:42 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	83-32-9	
Acenaphthylene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	208-96-8	
Acetophenone	**<9.9**	ug/L	9.9	1.9	1	02/25/19 14:20	02/26/19 14:02	98-86-2	
Aniline	**<9.9**	ug/L	9.9	1.2	1	02/25/19 14:20	02/26/19 14:02	62-53-3	
Anthracene	**<9.9**	ug/L	9.9	1.7	1	02/25/19 14:20	02/26/19 14:02	120-12-7	
Atrazine	**<19.8**	ug/L	19.8	2.6	1	02/25/19 14:20	02/26/19 14:02	1912-24-9	L2
Benzaldehyde	**<19.8**	ug/L	19.8	1.2	1	02/25/19 14:20	02/26/19 14:02	100-52-7	
Benzo(a)anthracene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 14:20	02/26/19 14:02	56-55-3	
Benzo(a)pyrene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 14:20	02/26/19 14:02	50-32-8	
Benzo(b)fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 14:20	02/26/19 14:02	205-99-2	
Benzo(g,h,i)perylene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 14:20	02/26/19 14:02	191-24-2	
Benzo(k)fluoranthene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 14:20	02/26/19 14:02	207-08-9	
Benzoic Acid	**<49.5**	ug/L	49.5	5.0	1	02/25/19 14:20	02/26/19 14:02	65-85-0	
Benzyl alcohol	**<19.8**	ug/L	19.8	3.0	1	02/25/19 14:20	02/26/19 14:02	100-51-6	
Biphenyl (Diphenyl)	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	92-52-4	
4-Bromophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	101-55-3	
Butylbenzylphthalate	**<9.9**	ug/L	9.9	2.5	1	02/25/19 14:20	02/26/19 14:02	85-68-7	
Caprolactam	**<9.9**	ug/L	9.9	0.95	1	02/25/19 14:20	02/26/19 14:02	105-60-2	
Carbazole	**<9.9**	ug/L	9.9	1.9	1	02/25/19 14:20	02/26/19 14:02	86-74-8	
4-Chloro-3-methylphenol	**<19.8**	ug/L	19.8	2.8	1	02/25/19 14:20	02/26/19 14:02	59-50-7	
4-Chloroaniline	**<19.8**	ug/L	19.8	2.8	1	02/25/19 14:20	02/26/19 14:02	106-47-8	
bis(2-Chloroethoxy)methane	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	111-91-1	
bis(2-Chloroethyl) ether	**<9.9**	ug/L	9.9	1.7	1	02/25/19 14:20	02/26/19 14:02	111-44-4	
2-Chloronaphthalene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	91-58-7	
2-Chlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	95-57-8	
4-Chlorophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	7005-72-3	
Chrysene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 14:20	02/26/19 14:02	218-01-9	
Dibenz(a,h)anthracene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 14:20	02/26/19 14:02	53-70-3	
Dibenzofuran	**<9.9**	ug/L	9.9	1.7	1	02/25/19 14:20	02/26/19 14:02	132-64-9	
1,2-Dichlorobenzene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	95-50-1	
1,3-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	541-73-1	
1,4-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	106-46-7	
3,3'-Dichlorobenzidine	**<19.8**	ug/L	19.8	3.8	1	02/25/19 14:20	02/26/19 14:02	91-94-1	
2,4-Dichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	120-83-2	
Diethylphthalate	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	84-66-2	
2,4-Dimethylphenol	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	105-67-9	
Dimethylphthalate	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	131-11-3	
Di-n-butylphthalate	**<9.9**	ug/L	9.9	2.0	1	02/25/19 14:20	02/26/19 14:02	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.8**	ug/L	19.8	2.2	1	02/25/19 14:20	02/26/19 14:02	534-52-1	
2,4-Dinitrophenol	**<49.5**	ug/L	49.5	5.0	1	02/25/19 14:20	02/26/19 14:02	51-28-5	
2,4-Dinitrotoluene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	121-14-2	
2,6-Dinitrotoluene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	606-20-2	
Di-n-octylphthalate	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 14:02	117-81-7	
Fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 14:20	02/26/19 14:02	206-44-0	
Fluorene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-2 **Lab ID: 92418293002** Collected: 02/18/19 12:42 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	87-68-3	
Hexachlorobenzene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	118-74-1	
Hexachlorocyclopentadiene	**<9.9**	ug/L	9.9	1.3	1	02/25/19 14:20	02/26/19 14:02	77-47-4	
Hexachloroethane	**<9.9**	ug/L	9.9	1.8	1	02/25/19 14:20	02/26/19 14:02	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 14:20	02/26/19 14:02	193-39-5	
Isophorone	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	78-59-1	
1-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	90-12-0	
2-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	91-57-6	
2-Methylphenol(o-Cresol)	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	15831-10-4	
Naphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	91-20-3	
2-Nitroaniline	**<49.5**	ug/L	49.5	2.2	1	02/25/19 14:20	02/26/19 14:02	88-74-4	
3-Nitroaniline	**<49.5**	ug/L	49.5	2.6	1	02/25/19 14:20	02/26/19 14:02	99-09-2	
4-Nitroaniline	**<19.8**	ug/L	19.8	3.3	1	02/25/19 14:20	02/26/19 14:02	100-01-6	
Nitrobenzene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	98-95-3	
2-Nitrophenol	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	88-75-5	
4-Nitrophenol	**<49.5**	ug/L	49.5	4.2	1	02/25/19 14:20	02/26/19 14:02	100-02-7	
N-Nitrosodimethylamine	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	62-75-9	
N-Nitroso-di-n-propylamine	**<9.9**	ug/L	9.9	1.7	1	02/25/19 14:20	02/26/19 14:02	621-64-7	
N-Nitrosodiphenylamine	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.9**	ug/L	9.9	1.8	1	02/25/19 14:20	02/26/19 14:02	108-60-1	
Pentachlorophenol	**<24.8**	ug/L	24.8	3.5	1	02/25/19 14:20	02/26/19 14:02	87-86-5	
Phenanthrene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 14:20	02/26/19 14:02	85-01-8	
Phenol	**<9.9**	ug/L	9.9	1.3	1	02/25/19 14:20	02/26/19 14:02	108-95-2	
Pyrene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 14:20	02/26/19 14:02	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.9**	ug/L	9.9	1.3	1	02/25/19 14:20	02/26/19 14:02	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.9**	ug/L	9.9	2.9	1	02/25/19 14:20	02/26/19 14:02	58-90-2	
1,2,4-Trichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	120-82-1	
2,4,5-Trichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 14:20	02/26/19 14:02	95-95-4	
2,4,6-Trichlorophenol	**<9.9**	ug/L	9.9	1.4	1	02/25/19 14:20	02/26/19 14:02	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	67	%	21-110		1	02/25/19 14:20	02/26/19 14:02	4165-60-0	
2-Fluorobiphenyl (S)	63	%	27-110		1	02/25/19 14:20	02/26/19 14:02	321-60-8	
Terphenyl-d14 (S)	71	%	31-107		1	02/25/19 14:20	02/26/19 14:02	1718-51-0	
Phenol-d6 (S)	26	%	10-110		1	02/25/19 14:20	02/26/19 14:02	13127-88-3	
2-Fluorophenol (S)	37	%	12-110		1	02/25/19 14:20	02/26/19 14:02	367-12-4	
2,4,6-Tribromophenol (S)	74	%	27-110		1	02/25/19 14:20	02/26/19 14:02	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-3 **Lab ID: 92418293003** Collected: 02/18/19 12:52 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 14:30	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 14:30	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 14:30	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 14:30	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 14:30	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 14:30	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 14:30	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 14:30	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 14:30	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 14:30	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 14:30	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 14:30	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 14:30	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 14:30	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 14:30	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 14:30	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 14:30	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 14:30	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 14:30	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 14:30	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 14:30	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 14:30	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 14:30	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 14:30	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 14:30	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 14:30	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-3 **Lab ID: 92418293003** Collected: 02/18/19 12:52 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 14:30	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 14:30	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 14:30	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 14:30	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 14:30	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 14:30	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 14:30	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 14:30	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 14:30	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 14:30	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 14:30	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 14:30	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 14:30	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 14:30	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 14:30	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 14:30	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 14:30	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	66	%	21-110		1	02/25/19 14:20	02/26/19 14:30	4165-60-0	
2-Fluorobiphenyl (S)	62	%	27-110		1	02/25/19 14:20	02/26/19 14:30	321-60-8	
Terphenyl-d14 (S)	76	%	31-107		1	02/25/19 14:20	02/26/19 14:30	1718-51-0	
Phenol-d6 (S)	27	%	10-110		1	02/25/19 14:20	02/26/19 14:30	13127-88-3	
2-Fluorophenol (S)	37	%	12-110		1	02/25/19 14:20	02/26/19 14:30	367-12-4	
2,4,6-Tribromophenol (S)	76	%	27-110		1	02/25/19 14:20	02/26/19 14:30	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-4 **Lab ID: 92418293004** Collected: 02/18/19 12:23 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 15:28	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 15:28	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:28	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 15:28	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 15:28	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 15:28	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:28	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 15:28	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:28	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:28	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 15:28	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 15:28	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 15:28	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 15:28	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:28	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 15:28	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 15:28	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:28	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:28	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:28	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 15:28	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 15:28	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 15:28	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 15:28	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 15:28	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:28	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: SW-4 **Lab ID: 92418293004** Collected: 02/18/19 12:23 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:28	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:28	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:28	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 15:28	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 15:28	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 15:28	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 15:28	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:28	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:28	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 15:28	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:28	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:28	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:28	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:28	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 15:28	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:28	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:28	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	45	%	21-110		1	02/25/19 14:20	02/26/19 15:28	4165-60-0	
2-Fluorobiphenyl (S)	41	%	27-110		1	02/25/19 14:20	02/26/19 15:28	321-60-8	
Terphenyl-d14 (S)	66	%	31-107		1	02/25/19 14:20	02/26/19 15:28	1718-51-0	
Phenol-d6 (S)	19	%	10-110		1	02/25/19 14:20	02/26/19 15:28	13127-88-3	
2-Fluorophenol (S)	25	%	12-110		1	02/25/19 14:20	02/26/19 15:28	367-12-4	
2,4,6-Tribromophenol (S)	67	%	27-110		1	02/25/19 14:20	02/26/19 15:28	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-22 **Lab ID: 92418293005** Collected: 02/18/19 12:05 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 15:57	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 15:57	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:57	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 15:57	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 15:57	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 15:57	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:57	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 15:57	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:57	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:57	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 15:57	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 15:57	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 15:57	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 15:57	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:57	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 15:57	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 15:57	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:57	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:57	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:57	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 15:57	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 15:57	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 15:57	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 15:57	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 15:57	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:57	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-22 **Lab ID: 92418293005** Collected: 02/18/19 12:05 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:57	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:57	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 15:57	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 15:57	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 15:57	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 15:57	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 15:57	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 15:57	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 15:57	108-60-1	
Pentachlorophenol	**128**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 15:57	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 15:57	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:57	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 15:57	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 15:57	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 15:57	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 15:57	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 15:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	43	%	21-110		1	02/25/19 14:20	02/26/19 15:57	4165-60-0	
2-Fluorobiphenyl (S)	39	%	27-110		1	02/25/19 14:20	02/26/19 15:57	321-60-8	
Terphenyl-d14 (S)	76	%	31-107		1	02/25/19 14:20	02/26/19 15:57	1718-51-0	
Phenol-d6 (S)	18	%	10-110		1	02/25/19 14:20	02/26/19 15:57	13127-88-3	
2-Fluorophenol (S)	24	%	12-110		1	02/25/19 14:20	02/26/19 15:57	367-12-4	
2,4,6-Tribromophenol (S)	60	%	27-110		1	02/25/19 14:20	02/26/19 15:57	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**47.8**	mg/L	5.0	1.0	1		02/20/19 14:30		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**7.3**	mg/L	1.0	0.50	1		02/21/19 18:54	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**1.7**	mg/L	1.0	0.50	1		02/23/19 02:30	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-23 **Lab ID: 92418293006** Collected: 02/18/19 14:25 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 16:26	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 16:26	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:26	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 16:26	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 16:26	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 16:26	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:26	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 16:26	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:26	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:26	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 16:26	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 16:26	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 16:26	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 16:26	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:26	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 16:26	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 16:26	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:26	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:26	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:26	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 16:26	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 16:26	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 16:26	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 16:26	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 16:26	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:26	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-23 **Lab ID: 92418293006** Collected: 02/18/19 14:25 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:26	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:26	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:26	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 16:26	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 16:26	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 16:26	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 16:26	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:26	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:26	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 16:26	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:26	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:26	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:26	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:26	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 16:26	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:26	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:26	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	77	%	21-110		1	02/25/19 14:20	02/26/19 16:26	4165-60-0	
2-Fluorobiphenyl (S)	73	%	27-110		1	02/25/19 14:20	02/26/19 16:26	321-60-8	
Terphenyl-d14 (S)	73	%	31-107		1	02/25/19 14:20	02/26/19 16:26	1718-51-0	
Phenol-d6 (S)	37	%	10-110		1	02/25/19 14:20	02/26/19 16:26	13127-88-3	
2-Fluorophenol (S)	49	%	12-110		1	02/25/19 14:20	02/26/19 16:26	367-12-4	
2,4,6-Tribromophenol (S)	88	%	27-110		1	02/25/19 14:20	02/26/19 16:26	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**680**	mg/L	5.0	1.0	1		02/20/19 14:37		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**21.9**	mg/L	1.0	0.50	1		02/21/19 18:55	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**13.9**	mg/L	1.0	0.50	1		02/23/19 03:06	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-24 **Lab ID: 92418293007** Collected: 02/18/19 10:20 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 16:55	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/25/19 14:20	02/26/19 16:55	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:55	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/25/19 14:20	02/26/19 16:55	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/25/19 14:20	02/26/19 16:55	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 16:55	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:55	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/25/19 14:20	02/26/19 16:55	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:55	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:55	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/25/19 14:20	02/26/19 16:55	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/25/19 14:20	02/26/19 16:55	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/25/19 14:20	02/26/19 16:55	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/25/19 14:20	02/26/19 16:55	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:55	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 16:55	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/25/19 14:20	02/26/19 16:55	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:55	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:55	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:55	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/25/19 14:20	02/26/19 16:55	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/25/19 14:20	02/26/19 16:55	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/25/19 14:20	02/26/19 16:55	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/25/19 14:20	02/26/19 16:55	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 14:20	02/26/19 16:55	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:55	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Lumber
Pace Project No.: 92418293

Sample: MW-24 **Lab ID: 92418293007** Collected: 02/18/19 10:20 Received: 02/19/19 10:57 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:55	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:55	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/25/19 14:20	02/26/19 16:55	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/25/19 14:20	02/26/19 16:55	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/25/19 14:20	02/26/19 16:55	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/25/19 14:20	02/26/19 16:55	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/25/19 14:20	02/26/19 16:55	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/25/19 14:20	02/26/19 16:55	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/25/19 14:20	02/26/19 16:55	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/25/19 14:20	02/26/19 16:55	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/25/19 14:20	02/26/19 16:55	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:55	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/25/19 14:20	02/26/19 16:55	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/25/19 14:20	02/26/19 16:55	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/25/19 14:20	02/26/19 16:55	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/25/19 14:20	02/26/19 16:55	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/25/19 14:20	02/26/19 16:55	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	73	%	21-110		1	02/25/19 14:20	02/26/19 16:55	4165-60-0	
2-Fluorobiphenyl (S)	69	%	27-110		1	02/25/19 14:20	02/26/19 16:55	321-60-8	
Terphenyl-d14 (S)	71	%	31-107		1	02/25/19 14:20	02/26/19 16:55	1718-51-0	
Phenol-d6 (S)	38	%	10-110		1	02/25/19 14:20	02/26/19 16:55	13127-88-3	
2-Fluorophenol (S)	48	%	12-110		1	02/25/19 14:20	02/26/19 16:55	367-12-4	
2,4,6-Tribromophenol (S)	85	%	27-110		1	02/25/19 14:20	02/26/19 16:55	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**1310**	mg/L	5.0	1.0	1		02/20/19 14:46		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**16.2**	mg/L	1.0	0.50	1		02/21/19 18:56	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**37.2**	mg/L	1.0	0.50	1		02/23/19 03:17	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

QC Batch: 459960 Analysis Method: EPA 8270D
QC Batch Method: EPA 3510C Analysis Description: 8270 Water MSSV
Associated Lab Samples: 92418293001, 92418293002, 92418293003, 92418293004, 92418293005, 92418293006, 92418293007

METHOD BLANK: 2506311 Matrix: Water
Associated Lab Samples: 92418293001, 92418293002, 92418293003, 92418293004, 92418293005, 92418293006, 92418293007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
1,2,4-Trichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1,2-Dichlorobenzene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
1,3-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1,4-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	10.0	1.8	02/26/19 12:35	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	10.0	2.9	02/26/19 12:35	
2,4,5-Trichlorophenol	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2,4,6-Trichlorophenol	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2,4-Dichlorophenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2,4-Dimethylphenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2,4-Dinitrophenol	ug/L	<50.0	50.0	5.1	02/26/19 12:35	
2,4-Dinitrotoluene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2,6-Dinitrotoluene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2-Chloronaphthalene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2-Chlorophenol	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2-Nitroaniline	ug/L	<50.0	50.0	2.3	02/26/19 12:35	
2-Nitrophenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
3,3'-Dichlorobenzidine	ug/L	<20.0	20.0	3.9	02/26/19 12:35	
3-Nitroaniline	ug/L	<50.0	50.0	2.7	02/26/19 12:35	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	2.2	02/26/19 12:35	
4-Bromophenylphenyl ether	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
4-Chloro-3-methylphenol	ug/L	<20.0	20.0	2.8	02/26/19 12:35	
4-Chloroaniline	ug/L	<20.0	20.0	2.8	02/26/19 12:35	
4-Chlorophenylphenyl ether	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
4-Nitroaniline	ug/L	<20.0	20.0	3.4	02/26/19 12:35	
4-Nitrophenol	ug/L	<50.0	50.0	4.3	02/26/19 12:35	
Acenaphthene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Acenaphthylene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
Acetophenone	ug/L	<10.0	10.0	1.9	02/26/19 12:35	
Aniline	ug/L	<10.0	10.0	1.2	02/26/19 12:35	
Anthracene	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Atrazine	ug/L	<20.0	20.0	2.6	02/26/19 12:35	
Benzaldehyde	ug/L	<20.0	20.0	1.3	02/26/19 12:35	
Benzo(a)anthracene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Benzo(a)pyrene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
Benzo(b)fluoranthene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

METHOD BLANK: 2506311 Matrix: Water
Associated Lab Samples: 92418293001, 92418293002, 92418293003, 92418293004, 92418293005, 92418293006, 92418293007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(g,h,i)perylene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Benzo(k)fluoranthene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Benzoic Acid	ug/L	<50.0	50.0	5.0	02/26/19 12:35	
Benzyl alcohol	ug/L	<20.0	20.0	3.1	02/26/19 12:35	
Biphenyl (Diphenyl)	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
bis(2-Chloroethoxy)methane	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
bis(2-Chloroethyl) ether	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	6.0	2.3	02/26/19 12:35	
Butylbenzylphthalate	ug/L	<10.0	10.0	2.5	02/26/19 12:35	
Caprolactam	ug/L	<10.0	10.0	0.96	02/26/19 12:35	
Carbazole	ug/L	<10.0	10.0	1.9	02/26/19 12:35	
Chrysene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Di-n-butylphthalate	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Di-n-octylphthalate	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
Dibenz(a,h)anthracene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Dibenzofuran	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Diethylphthalate	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Dimethylphthalate	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Fluoranthene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
Fluorene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Hexachloro-1,3-butadiene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Hexachlorobenzene	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Hexachlorocyclopentadiene	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
Hexachloroethane	ug/L	<10.0	10.0	1.8	02/26/19 12:35	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Isophorone	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
N-Nitroso-di-n-propylamine	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
N-Nitrosodimethylamine	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
N-Nitrosodiphenylamine	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Naphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Nitrobenzene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Pentachlorophenol	ug/L	<25.0	25.0	3.5	02/26/19 12:35	
Phenanthrene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Phenol	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
Pyrene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
2,4,6-Tribromophenol (S)	%	51	27-110		02/26/19 12:35	
2-Fluorobiphenyl (S)	%	45	27-110		02/26/19 12:35	
2-Fluorophenol (S)	%	29	12-110		02/26/19 12:35	
Nitrobenzene-d5 (S)	%	51	21-110		02/26/19 12:35	
Phenol-d6 (S)	%	20	10-110		02/26/19 12:35	
Terphenyl-d14 (S)	%	53	31-107		02/26/19 12:35	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

LABORATORY CONTROL SAMPLE: 2506312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	50	25.7	51	44-130	
1,2,4-Trichlorobenzene	ug/L	50	22.5	45	37-130	
1,2-Dichlorobenzene	ug/L	50	23.4	47	34-130	
1,3-Dichlorobenzene	ug/L	50	22.5	45	30-130	
1,4-Dichlorobenzene	ug/L	50	24.8	50	32-130	
1-Methylnaphthalene	ug/L	50	30.1	60	45-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	28.3	57	33-130	
2,3,4,6-Tetrachlorophenol	ug/L	50	45.2	90	10-200	
2,4,5-Trichlorophenol	ug/L	50	29.0	58	17-130	
2,4,6-Trichlorophenol	ug/L	50	29.3	59	10-137	
2,4-Dichlorophenol	ug/L	50	27.3	55	24-130	
2,4-Dimethylphenol	ug/L	50	28.1	56	37-130	
2,4-Dinitrophenol	ug/L	250	177	71	10-160	
2,4-Dinitrotoluene	ug/L	50	36.7	73	61-130	
2,6-Dinitrotoluene	ug/L	50	36.2	72	64-130	
2-Chloronaphthalene	ug/L	50	30.5	61	54-130	
2-Chlorophenol	ug/L	50	26.3	53	24-130	
2-Methylnaphthalene	ug/L	50	29.3	59	47-130	
2-Methylphenol(o-Cresol)	ug/L	50	23.9	48	30-130	
2-Nitroaniline	ug/L	100	64.7	65	52-130	
2-Nitrophenol	ug/L	50	27.1	54	15-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	22.8	46	10-168	
3,3'-Dichlorobenzidine	ug/L	100	64.3	64	10-143	
3-Nitroaniline	ug/L	100	69.8	70	57-130	
4,6-Dinitro-2-methylphenol	ug/L	100	65.9	66	10-166	
4-Bromophenylphenyl ether	ug/L	50	29.2	58	55-130	
4-Chloro-3-methylphenol	ug/L	100	63.8	64	37-130	
4-Chloroaniline	ug/L	100	58.1	58	46-130	
4-Chlorophenylphenyl ether	ug/L	50	31.9	64	55-130	
4-Nitroaniline	ug/L	100	74.6	75	58-130	
4-Nitrophenol	ug/L	250	99.6	40	10-130	
Acenaphthene	ug/L	50	32.4	65	54-130	
Acenaphthylene	ug/L	50	33.9	68	54-130	
Acetophenone	ug/L	50	29.3	59	41-130	
Aniline	ug/L	50	24.2	48	30-130	
Anthracene	ug/L	50	33.5	67	60-130	
Atrazine	ug/L	50	<20.0	31	50-158	L2
Benzaldehyde	ug/L	50	32.3	65	10-130	
Benzo(a)anthracene	ug/L	50	35.6	71	60-130	
Benzo(a)pyrene	ug/L	50	36.1	72	56-130	
Benzo(b)fluoranthene	ug/L	50	39.4	79	59-130	
Benzo(g,h,i)perylene	ug/L	50	35.1	70	58-130	
Benzo(k)fluoranthene	ug/L	50	36.2	72	56-130	
Benzoic Acid	ug/L	250	90.8	36	10-130	
Benzyl alcohol	ug/L	100	53.0	53	34-130	
Biphenyl (Diphenyl)	ug/L	50	26.6	53	49-130	
bis(2-Chloroethoxy)methane	ug/L	50	28.4	57	46-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

LABORATORY CONTROL SAMPLE: 2506312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethyl) ether	ug/L	50	27.4	55	41-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	33.7	67	54-130	
Butylbenzylphthalate	ug/L	50	34.9	70	52-130	
Caprolactam	ug/L	50	12.0	24	10-130	
Carbazole	ug/L	50	33.0	66	59-130	
Chrysene	ug/L	50	34.4	69	60-130	
Di-n-butylphthalate	ug/L	50	33.1	66	57-130	
Di-n-octylphthalate	ug/L	50	38.2	76	52-130	
Dibenz(a,h)anthracene	ug/L	50	35.7	71	55-130	
Dibenzofuran	ug/L	50	31.2	62	57-130	
Diethylphthalate	ug/L	50	35.0	70	53-130	
Dimethylphthalate	ug/L	50	34.2	68	54-130	
Fluoranthene	ug/L	50	36.9	74	58-130	
Fluorene	ug/L	50	34.6	69	58-130	
Hexachloro-1,3-butadiene	ug/L	50	19.7	39	27-130	
Hexachlorobenzene	ug/L	50	29.8	60	55-130	
Hexachlorocyclopentadiene	ug/L	50	16.2	32	22-130	
Hexachloroethane	ug/L	50	20.6	41	25-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	36.5	73	58-130	
Isophorone	ug/L	50	26.4	53	39-130	
N-Nitroso-di-n-propylamine	ug/L	50	31.3	63	47-130	
N-Nitrosodimethylamine	ug/L	50	18.9	38	23-130	
N-Nitrosodiphenylamine	ug/L	50	28.9	58	56-130	
Naphthalene	ug/L	50	28.4	57	41-130	
Nitrobenzene	ug/L	50	27.7	55	42-130	
Pentachlorophenol	ug/L	100	59.4	59	10-137	
Phenanthrene	ug/L	50	33.0	66	59-130	
Phenol	ug/L	50	15.0	30	10-130	
Pyrene	ug/L	50	33.6	67	59-130	
2,4,6-Tribromophenol (S)	%			66	27-110	
2-Fluorobiphenyl (S)	%			52	27-110	
2-Fluorophenol (S)	%			36	12-110	
Nitrobenzene-d5 (S)	%			56	21-110	
Phenol-d6 (S)	%			26	10-110	
Terphenyl-d14 (S)	%			61	31-107	

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<9.8	49	25.1	51	26-130	
1,2,4-Trichlorobenzene	ug/L	<9.8	49	20.5	42	18-130	
1,2-Dichlorobenzene	ug/L	<9.8	49	21.0	43	17-130	
1,3-Dichlorobenzene	ug/L	<9.8	49	19.9	41	16-130	
1,4-Dichlorobenzene	ug/L	<9.8	49	22.3	42	17-130	
1-Methylnaphthalene	ug/L	<9.8	49	27.9	57	38-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/L	<9.8	49	24.6	50	10-130	
2,3,4,6-Tetrachlorophenol	ug/L	<9.8	49	36.7	75	10-200	
2,4,5-Trichlorophenol	ug/L	<9.8	49	27.1	55	23-133	
2,4,6-Trichlorophenol	ug/L	<9.8	49	27.7	56	10-146	
2,4-Dichlorophenol	ug/L	<9.8	49	25.5	52	11-136	
2,4-Dimethylphenol	ug/L	<9.8	49	26.1	53	20-130	
2,4-Dinitrophenol	ug/L	<49.0	245	149	61	10-159	
2,4-Dinitrotoluene	ug/L	<9.8	49	34.8	71	66-130	
2,6-Dinitrotoluene	ug/L	<9.8	49	33.9	69	65-130	
2-Chloronaphthalene	ug/L	<9.8	49	28.8	59	40-132	
2-Chlorophenol	ug/L	<9.8	49	22.7	46	10-130	
2-Methylnaphthalene	ug/L	<9.8	49	26.7	55	47-130	
2-Methylphenol(o-Cresol)	ug/L	<9.8	49	21.6	44	10-130	
2-Nitroaniline	ug/L	<49.0	98	61.2	62	49-130	
2-Nitrophenol	ug/L	<9.8	49	24.2	49	10-145	
3&4-Methylphenol(m&p Cresol)	ug/L	<9.8	49	20.7	42	10-197	
3,3'-Dichlorobenzidine	ug/L	<19.6	98	58.5	60	10-130	
3-Nitroaniline	ug/L	<49.0	98	66.0	67	58-130	
4,6-Dinitro-2-methylphenol	ug/L	<19.6	98	63.5	65	10-174	
4-Bromophenylphenyl ether	ug/L	<9.8	49	28.0	57	52-130	
4-Chloro-3-methylphenol	ug/L	<19.6	98	61.1	62	38-130	
4-Chloroaniline	ug/L	<19.6	98	54.2	55	31-130	
4-Chlorophenylphenyl ether	ug/L	<9.8	49	30.5	62	19-130	
4-Nitroaniline	ug/L	<19.6	98	70.7	72	59-130	
4-Nitrophenol	ug/L	<49.0	245	97.6	40	10-130	
Acenaphthene	ug/L	<9.8	49	30.7	63	50-130	
Acenaphthylene	ug/L	<9.8	49	32.3	66	50-130	
Acetophenone	ug/L	<9.8	49	26.6	54	26-130	
Aniline	ug/L	<9.8	49	21.1	43	14-130	
Anthracene	ug/L	<9.8	49	32.0	65	61-130	
Atrazine	ug/L	<19.6	49	<19.6	39	46-150	M0
Benzaldehyde	ug/L	<19.6	49	23.7	48	10-130	
Benzo(a)anthracene	ug/L	<9.8	49	33.8	69	60-130	
Benzo(a)pyrene	ug/L	<9.8	49	35.4	72	58-130	
Benzo(b)fluoranthene	ug/L	<9.8	49	38.2	78	53-139	
Benzo(g,h,i)perylene	ug/L	<9.8	49	33.9	69	58-130	
Benzo(k)fluoranthene	ug/L	<9.8	49	35.7	73	51-130	
Benzoic Acid	ug/L	<49.0	245	<49.0	19	10-130	
Benzyl alcohol	ug/L	<19.6	98	47.5	48	23-130	
Biphenyl (Diphenyl)	ug/L	<9.8	49	25.4	52	44-130	
bis(2-Chloroethoxy)methane	ug/L	<9.8	49	25.4	52	29-130	
bis(2-Chloroethyl) ether	ug/L	<9.8	49	23.6	48	21-130	
bis(2-Ethylhexyl)phthalate	ug/L	<5.9	49	31.7	65	46-140	
Butylbenzylphthalate	ug/L	<9.8	49	33.1	68	45-147	
Caprolactam	ug/L	<9.8	49	<9.8	19	10-130	
Carbazole	ug/L	<9.8	49	31.7	65	63-130	
Chrysene	ug/L	<9.8	49	32.6	67	60-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Di-n-butylphthalate	ug/L	<9.8	49	32.0	65	56-130	
Di-n-octylphthalate	ug/L	<9.8	49	36.2	74	38-155	
Dibenz(a,h)anthracene	ug/L	<9.8	49	34.0	69	54-130	
Dibenzofuran	ug/L	<9.8	49	29.5	60	56-130	
Diethylphthalate	ug/L	<9.8	49	33.2	68	54-130	
Dimethylphthalate	ug/L	<9.8	49	32.1	66	53-130	
Fluoranthene	ug/L	<9.8	49	35.6	73	61-130	
Fluorene	ug/L	<9.8	49	33.2	68	56-130	
Hexachloro-1,3-butadiene	ug/L	<9.8	49	18.4	37	10-130	
Hexachlorobenzene	ug/L	<9.8	49	28.8	59	54-130	
Hexachlorocyclopentadiene	ug/L	<9.8	49	15.9	33	10-137	
Hexachloroethane	ug/L	<9.8	49	18.7	38	13-130	
Indeno(1,2,3-cd)pyrene	ug/L	<9.8	49	35.5	72	58-130	
Isophorone	ug/L	<9.8	49	24.8	51	25-130	
N-Nitroso-di-n-propylamine	ug/L	<9.8	49	28.7	58	21-132	
N-Nitrosodimethylamine	ug/L	<9.8	49	16.9	35	10-130	
N-Nitrosodiphenylamine	ug/L	<9.8	49	27.8	57	53-130	
Naphthalene	ug/L	<9.8	49	25.6	52	26-130	
Nitrobenzene	ug/L	<9.8	49	24.6	50	27-130	
Pentachlorophenol	ug/L	<24.5	98	56.8	58	10-130	
Phenanthrene	ug/L	<9.8	49	31.7	65	57-130	
Phenol	ug/L	<9.8	49	13.7	28	10-130	
Pyrene	ug/L	<9.8	49	31.9	65	54-130	
2,4,6-Tribromophenol (S)	%				65	27-110	
2-Fluorobiphenyl (S)	%				51	27-110	
2-Fluorophenol (S)	%				31	12-110	
Nitrobenzene-d5 (S)	%				51	21-110	
Phenol-d6 (S)	%				25	10-110	
Terphenyl-d14 (S)	%				57	31-107	

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<9.8	<9.9		30	
1,2,4-Trichlorobenzene	ug/L	<9.8	<9.9		30	
1,2-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1,3-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1,4-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1-Methylnaphthalene	ug/L	<9.8	<9.9		30	
2,2'-Oxybis(1-chloropropane)	ug/L	<9.8	<9.9		30	
2,3,4,6-Tetrachlorophenol	ug/L	<9.8	<9.9		30	
2,4,5-Trichlorophenol	ug/L	<9.8	<9.9		30	
2,4,6-Trichlorophenol	ug/L	<9.8	<9.9		30	
2,4-Dichlorophenol	ug/L	<9.8	<9.9		30	
2,4-Dimethylphenol	ug/L	<9.8	<9.9		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
2,4-Dinitrophenol	ug/L	<49.0	<49.5		30	
2,4-Dinitrotoluene	ug/L	<9.8	<9.9		30	
2,6-Dinitrotoluene	ug/L	<9.8	<9.9		30	
2-Chloronaphthalene	ug/L	<9.8	<9.9		30	
2-Chlorophenol	ug/L	<9.8	<9.9		30	
2-Methylnaphthalene	ug/L	<9.8	<9.9		30	
2-Methylphenol(o-Cresol)	ug/L	<9.8	<9.9		30	
2-Nitroaniline	ug/L	<49.0	<49.5		30	
2-Nitrophenol	ug/L	<9.8	<9.9		30	
3&4-Methylphenol(m&p Cresol)	ug/L	<9.8	<9.9		30	
3,3'-Dichlorobenzidine	ug/L	<19.6	<19.8		30	
3-Nitroaniline	ug/L	<49.0	<49.5		30	
4,6-Dinitro-2-methylphenol	ug/L	<19.6	<19.8		30	
4-Bromophenylphenyl ether	ug/L	<9.8	<9.9		30	
4-Chloro-3-methylphenol	ug/L	<19.6	<19.8		30	
4-Chloroaniline	ug/L	<19.6	<19.8		30	
4-Chlorophenylphenyl ether	ug/L	<9.8	<9.9		30	
4-Nitroaniline	ug/L	<19.6	<19.8		30	
4-Nitrophenol	ug/L	<49.0	<49.5		30	
Acenaphthene	ug/L	<9.8	<9.9		30	
Acenaphthylene	ug/L	<9.8	<9.9		30	
Acetophenone	ug/L	<9.8	<9.9		30	
Aniline	ug/L	<9.8	<9.9		30	
Anthracene	ug/L	<9.8	<9.9		30	
Atrazine	ug/L	<19.6	<19.8		30	
Benzaldehyde	ug/L	<19.6	<19.8		30	
Benzo(a)anthracene	ug/L	<9.8	<9.9		30	
Benzo(a)pyrene	ug/L	<9.8	<9.9		30	
Benzo(b)fluoranthene	ug/L	<9.8	<9.9		30	
Benzo(g,h,i)perylene	ug/L	<9.8	<9.9		30	
Benzo(k)fluoranthene	ug/L	<9.8	<9.9		30	
Benzoic Acid	ug/L	<49.0	<49.5		0	
Benzyl alcohol	ug/L	<19.6	<19.8		30	
Biphenyl (Diphenyl)	ug/L	<9.8	<9.9		30	
bis(2-Chloroethoxy)methane	ug/L	<9.8	<9.9		30	
bis(2-Chloroethyl) ether	ug/L	<9.8	<9.9		30	
bis(2-Ethylhexyl)phthalate	ug/L	<5.9	<5.9		30	
Butylbenzylphthalate	ug/L	<9.8	<9.9		30	
Caprolactam	ug/L	<9.8	<9.9		30	
Carbazole	ug/L	<9.8	<9.9		30	
Chrysene	ug/L	<9.8	<9.9		30	
Di-n-butylphthalate	ug/L	<9.8	<9.9		30	
Di-n-octylphthalate	ug/L	<9.8	<9.9		30	
Dibenz(a,h)anthracene	ug/L	<9.8	<9.9		30	
Dibenzofuran	ug/L	<9.8	<9.9		30	
Diethylphthalate	ug/L	<9.8	<9.9		30	
Dimethylphthalate	ug/L	<9.8	<9.9		30	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoranthene	ug/L	<9.8	<9.9		30	
Fluorene	ug/L	<9.8	<9.9		30	
Hexachloro-1,3-butadiene	ug/L	<9.8	<9.9		30	
Hexachlorobenzene	ug/L	<9.8	<9.9		30	
Hexachlorocyclopentadiene	ug/L	<9.8	<9.9		30	
Hexachloroethane	ug/L	<9.8	<9.9		30	
Indeno(1,2,3-cd)pyrene	ug/L	<9.8	<9.9		30	
Isophorone	ug/L	<9.8	<9.9		30	
N-Nitroso-di-n-propylamine	ug/L	<9.8	<9.9		30	
N-Nitrosodimethylamine	ug/L	<9.8	<9.9		30	
N-Nitrosodiphenylamine	ug/L	<9.8	<9.9		30	
Naphthalene	ug/L	<9.8	<9.9		30	
Nitrobenzene	ug/L	<9.8	<9.9		30	
Pentachlorophenol	ug/L	<24.5	<24.8		30	
Phenanthrene	ug/L	<9.8	<9.9		30	
Phenol	ug/L	<9.8	<9.9		30	
Pyrene	ug/L	<9.8	<9.9		30	
2,4,6-Tribromophenol (S)	%	76	71	6		
2-Fluorobiphenyl (S)	%	62	55	12		
2-Fluorophenol (S)	%	37	33	10		
Nitrobenzene-d5 (S)	%	66	59	10		
Phenol-d6 (S)	%	27	24	11		
Terphenyl-d14 (S)	%	76	66	13		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

QC Batch: 459142 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Associated Lab Samples: 92418293005, 92418293006, 92418293007

METHOD BLANK: 2502260 Matrix: Water
Associated Lab Samples: 92418293005, 92418293006, 92418293007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<5.0	5.0	1.0	02/20/19 12:12	

LABORATORY CONTROL SAMPLE: 2502261

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.0	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2502262 2502263

Parameter	Units	92418135001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	369	50	50	426	414	114	89	80-120	3	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2502264 2502265

Parameter	Units	92418135011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	5.8	50	50	59.0	58.3	106	105	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

QC Batch: 459474 Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 Analysis Description: 4500 Chloride
Associated Lab Samples: 92418293005, 92418293006, 92418293007

METHOD BLANK: 2503898 Matrix: Water
Associated Lab Samples: 92418293005, 92418293006, 92418293007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	0.50	02/21/19 18:50	

LABORATORY CONTROL SAMPLE: 2503899

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	20.4	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2503900 2503901

Parameter	Units	92418603001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	11000	10	10	10900	10900	-1230	-1670	90-110	0	10	M6

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Marsh Lumber
Pace Project No.: 92418293

QC Batch: 459648 Analysis Method: SM 5310B-2011
QC Batch Method: SM 5310B-2011 Analysis Description: 5310B TOC
Associated Lab Samples: 92418293005, 92418293006, 92418293007

METHOD BLANK: 2504612 Matrix: Water
Associated Lab Samples: 92418293005, 92418293006, 92418293007

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<1.0	1.0	0.50	02/23/19 01:55	

LABORATORY CONTROL SAMPLE: 2504613

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	26.1	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2504614 2504615

Parameter	Units	92418293005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.7	25	25	26.2	26.1	98	98	90-110	0	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2504616 2504617

Parameter	Units	92418327008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	2.6	25	25	27.4	27.4	99	99	90-110	0	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Marsh Lumber
Pace Project No.: 92418293

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Marsh Lumber
Pace Project No.: 92418293

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92418293001	**SW-1**	EPA 3510C	459960	EPA 8270D	460107
92418293002	**SW-2**	EPA 3510C	459960	EPA 8270D	460107
92418293003	**SW-3**	EPA 3510C	459960	EPA 8270D	460107
92418293004	**SW-4**	EPA 3510C	459960	EPA 8270D	460107
92418293005	**MW-22**	EPA 3510C	459960	EPA 8270D	460107
92418293006	**MW-23**	EPA 3510C	459960	EPA 8270D	460107
92418293007	**MW-24**	EPA 3510C	459960	EPA 8270D	460107
92418293005	**MW-22**	SM 2320B-2011	459142		
92418293006	**MW-23**	SM 2320B-2011	459142		
92418293007	**MW-24**	SM 2320B-2011	459142		
92418293005	**MW-22**	SM 4500-Cl-E-2011	459474		
92418293006	**MW-23**	SM 4500-Cl-E-2011	459474		
92418293007	**MW-24**	SM 4500-Cl-E-2011	459474		
92418293005	**MW-22**	SM 5310B-2011	459648		
92418293006	**MW-23**	SM 5310B-2011	459648		
92418293007	**MW-24**	SM 5310B-2011	459648		

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: SAME, INC

Project #:

WO# : 92418293

92418293

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☑ Pace ☐ Other: ____

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☑ No

Date/Initials Person Examining Contents: SR 2-19-19

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☑ No ☐ N/A

Thermometer: ☑ IR Gun ID: 92T048

Type of Ice: ☑ Wet ☐ Blue ☐ None

Cooler Temp (°C): 0.7 **Correction Factor: Add/Subtract (°C)** 0.0

Cooler Temp Corrected (°C): 0.7

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)

Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☑ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC?	☑ Yes	☐ No	☐ N/A	9.
-Includes Date/Time/ID/Analysis Matrix: WW				
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☑ No	☐ N/A	11.
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

Field Data Required? ☐ Yes ☐ No

COMMENTS/SAMPLE DISCREPANCY

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: ____ Date/Time: ____

Project Manager SCURF Review: TL **Date:** 2/20/19

Project Manager SRF Review: TC **Date:** 2/20/19

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # **WO# : 9241.8293**

PM: RWC Due Date: 02/26/19

CLIENT: 92-S&ME Gbor

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1										2																			
2										2																			
3										2																			
4										2																			
5		2								2										3									
6		2								2										3									
7		2								2										3									
8																													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company:	S&ME, Inc
Address:	8646 W. Market Street, Suite 105
	Greensboro, NC 27409
Email To:	ehenriques@smeinc.com
Phone: 336-288-7180	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Edmund Henriques (S&ME)
Copy To:	
Purchase Order No.:	
Project Name:	Marsh Lumber
Project Number:	1584-98-146C

Section C Invoice Information:

Attention:	Ed Henriques / Greensboro AP
Company Name:	S&ME Inc.
Address:	
Pace Quote Reference:	
Pace Project Manager:	trey.carter@pacelabs.com
Pace Profile #:	2237-24

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER VCC

Site Location STATE: SC

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8270 SVOC	Chloride	TOC 5310B	Alkalinity	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	SW-1	WW	G			2/18/19	12:02		2	2									x					9241829 7 001
2	SW-2	WW	G			2/18/19	12:42		2	2									x					002
3	SW-3	WW	G			2/18/19	12:52		2	2									x					003
4	SW-4	WW	G			2/18/19	12:23		2	2									x					004
5	MW-22	WW	G			2/18/19	12:05		7	4							3		x	x	x	x		005
6	MW-23	WW	G			2/18/19	14:25		7	4							3		x	x	x	x		006
7	MW-24	WW	G			2/18/19	10:20		7	4							3		x	x	x	x		007
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Ed Henriques	2-19-19	1056		2/19/19	1057				
		2/19/19	1602	Skipper Pace	2-19-19	1605	0.7	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Edmund Henriques & Gary Simcox

SIGNATURE of SAMPLER: Ed Henriques DATE Signed (MM/DD/YY): 2/19/19 2/19/19 EH

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical	Billing Information: Trey Carter - Pace Analytical
Address: 9700 Kincey Ave Huntersville NC, 28078	
Report To: Trey Carter	Email To: Trey.Carter@PaceLabs.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Marsh Lumber	State: SC / County/City: Pamplico Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: 704-977-0941 Email: Trey.Carter@PaceLabs.com	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): GARY SIMCOX	Purchase Order #: TC 18113 Quote #: 50015499-0 DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [✓] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (If applicable): [ ] Yes [✓] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Pentachlorophenol - 8151
MW-18B	GW	G	2/19/19	1205				2	X
MW-19	GW	G	2/19/19	0945				2	X
MW-30	GW	G	2/19/19	1550				2	X

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Lab Project Manager:

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips: _____	
Sample pH Acceptable	Y N NA
pH Strips: _____	
Sulfide Present	Y N NA
Lead Acetate Strips: _____	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 4.8
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____ oC
Cooler 1 Therm Corr. Factor: _____ oC
Cooler 1 Corrected Temp: _____ oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	2/19/19 1700		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

Pace Analytical®

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical	Billing Information: Trey Carter - Pace Analytical
Address: 9700 Kincey Ave Huntersville NC, 28078	
Report To: Trey Carter	Email To: Trey.Carter@PaceLabs.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Marsh Lumber	State: SC / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET
Phone: 704-977-0941 Email: Trey.Carter@PaceLabs.com	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Ed Henriques	Purchase Order #: TC 18113 Quote #: 50015499-0 DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [✓] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Lab Project Manager:

Analyses

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Pentachlorophenol - 8151
MW-22	GW	G	2/18/19	1205				2	X
MW-23	GW	G	2/18/19	1425				2	X
MW-24	GW	G	2/18/19	1020				2	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 2.2
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: ____oC
~~Cooler 1 Therm Corr. Factor: ____oC~~
Cooler 1 Corrected Temp: ____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Ed Henriques	2-19-19/0845		
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: _____ of: _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-158986-1
Client Project/Site: Marsh Lumber

For:
Pace Analytical Services, LLC
9800 Kincey Avenue, Suite 100
Huntersville, North Carolina 28078

Attn: Mr. Trey Carter

Therese Hargraves

Authorized for release by:
2/27/2019 3:31:29 PM

Therese Hargraves, Project Manager I
(708)534-5200
therese.hargraves@testamericainc.com

Table of Contents

Job ID: 500-158986-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-158986-1

Comments
No additional comments.

Receipt
The samples were received on 2/20/2019 11:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.2º C, 3.6º C and 4.8º C.

GC Semi VOA
Method(s) 8151A: The following sample required a dilution due to the nature of the sample matrix: MW-22 (500-158986-4). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8151A: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch preparation batch 500-473442 and analytical batch 500-473535 recovered outside control limits for the following analyte: Pentachlorophenol. Percent recoveries were in control.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-18B — Lab Sample ID: 500-158986-1

No Detections.

Client Sample ID: MW-19 — Lab Sample ID: 500-158986-2

No Detections.

Client Sample ID: MW-30 — Lab Sample ID: 500-158986-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.4	*	0.54	0.097	ug/L	1		8151A	Total/NA

Client Sample ID: MW-22 — Lab Sample ID: 500-158986-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	83	*	14	2.6	ug/L	25		8151A	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 500-158986-5

No Detections.

Client Sample ID: MW-24 — Lab Sample ID: 500-158986-6

No Detections.

Client Sample ID: MW-14A — Lab Sample ID: 500-158986-7

No Detections.

Client Sample ID: MW-15 — Lab Sample ID: 500-158986-8

No Detections.

Client Sample ID: MW-27 — Lab Sample ID: 500-158986-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pentachlorophenol	2.0	*	0.48	0.087	ug/L	1		8151A	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Method	Method Description	Protocol	Laboratory
8151A	Herbicides (GC)	SW846	TAL CHI
8151A	Extraction (Herbicides)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-158986-1	MW-18B	Water	02/19/19 12:05	02/20/19 11:00
500-158986-2	MW-19	Water	02/19/19 09:45	02/20/19 11:00
500-158986-3	MW-30	Water	02/19/19 15:50	02/20/19 11:00
500-158986-4	MW-22	Water	02/18/19 12:05	02/20/19 11:00
500-158986-5	MW-23	Water	02/18/19 14:25	02/20/19 11:00
500-158986-6	MW-24	Water	02/18/19 10:20	02/20/19 11:00
500-158986-7	MW-14A	Water	02/20/19 11:35	02/21/19 09:15
500-158986-8	MW-15	Water	02/20/19 12:40	02/21/19 09:15
500-158986-9	MW-27	Water	02/20/19 08:10	02/21/19 09:15

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-18B
Date Collected: 02/19/19 12:05
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-1
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.50	*	0.50	0.091	ug/L		02/22/19 09:03	02/23/19 06:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*88*		*25 - 130*	*02/22/19 09:03*	*02/23/19 06:58*	*1*

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-19
Date Collected: 02/19/19 09:45
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-2
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.49	*	0.49	0.089	ug/L		02/22/19 09:03	02/23/19 07:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*85*		*25 - 130*	*02/22/19 09:03*	*02/23/19 07:22*	*1*

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-30
Date Collected: 02/19/19 15:50
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-3
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	2.4	*	0.54	0.097	ug/L		02/22/19 09:03	02/23/19 07:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*102*		*25 - 130*	*02/22/19 09:03*	*02/23/19 07:46*	*1*

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-22
Date Collected: 02/18/19 12:05
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-4
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	83	*	14	2.6	ug/L		02/22/19 09:03	02/25/19 11:31	25

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*0*	*D*	*25 - 130*	*02/22/19 09:03*	*02/25/19 11:31*	*25*

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-23
Date Collected: 02/18/19 14:25
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-5
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.50	*	0.50	0.090	ug/L		02/22/19 09:03	02/23/19 08:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*88*		*25 - 130*	*02/22/19 09:03*	*02/23/19 08:35*	*1*

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-24
Date Collected: 02/18/19 10:20
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-6
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.53	*	0.53	0.095	ug/L		02/22/19 09:03	02/23/19 09:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*80*		*25 - 130*	*02/22/19 09:03*	*02/23/19 09:00*	*1*

Client Sample Results

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-14A
Date Collected: 02/20/19 11:35
Date Received: 02/21/19 09:15

Lab Sample ID: 500-158986-7
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.51	*	0.51	0.092	ug/L		02/22/19 09:03	02/23/19 09:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*73*		*25 - 130*	*02/22/19 09:03*	*02/23/19 09:24*	*1*

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-15
Date Collected: 02/20/19 12:40
Date Received: 02/21/19 09:15

Lab Sample ID: 500-158986-8
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.48	*	0.48	0.087	ug/L		02/22/19 09:03	02/23/19 10:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*69*		*25 - 130*	*02/22/19 09:03*	*02/23/19 10:38*	*1*

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-27
Date Collected: 02/20/19 08:10
Date Received: 02/21/19 09:15

Lab Sample ID: 500-158986-9
Matrix: Water

Method: 8151A - Herbicides (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	2.0	*	0.48	0.087	ug/L		02/22/19 09:03	02/23/19 11:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*71*		*25 - 130*	*02/22/19 09:03*	*02/23/19 11:02*	*1*

Definitions/Glossary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

GC Semi VOA

Prep Batch: 473442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-158986-1	MW-18B	Total/NA	Water	8151A	
500-158986-2	MW-19	Total/NA	Water	8151A	
500-158986-3	MW-30	Total/NA	Water	8151A	
500-158986-4	MW-22	Total/NA	Water	8151A	
500-158986-5	MW-23	Total/NA	Water	8151A	
500-158986-6	MW-24	Total/NA	Water	8151A	
500-158986-7	MW-14A	Total/NA	Water	8151A	
500-158986-8	MW-15	Total/NA	Water	8151A	
500-158986-9	MW-27	Total/NA	Water	8151A	
MB 500-473442/1-A	Method Blank	Total/NA	Water	8151A	
LCS 500-473442/2-A	Lab Control Sample	Total/NA	Water	8151A	
LCSD 500-473442/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	

Analysis Batch: 473535

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-158986-1	MW-18B	Total/NA	Water	8151A	473442
500-158986-2	MW-19	Total/NA	Water	8151A	473442
500-158986-3	MW-30	Total/NA	Water	8151A	473442
500-158986-4	MW-22	Total/NA	Water	8151A	473442
500-158986-5	MW-23	Total/NA	Water	8151A	473442
500-158986-6	MW-24	Total/NA	Water	8151A	473442
500-158986-7	MW-14A	Total/NA	Water	8151A	473442
500-158986-8	MW-15	Total/NA	Water	8151A	473442
500-158986-9	MW-27	Total/NA	Water	8151A	473442
MB 500-473442/1-A	Method Blank	Total/NA	Water	8151A	473442
LCS 500-473442/2-A	Lab Control Sample	Total/NA	Water	8151A	473442
LCSD 500-473442/3-A	Lab Control Sample Dup	Total/NA	Water	8151A	473442

Surrogate Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Method: 8151A - Herbicides (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DCPAA2 (25-130)							
500-158986-1	MW-18B	88							
500-158986-2	MW-19	85							
500-158986-3	MW-30	102							
500-158986-4	MW-22	0 D							
500-158986-5	MW-23	88							
500-158986-6	MW-24	80							
500-158986-7	MW-14A	73							
500-158986-8	MW-15	69							
500-158986-9	MW-27	71							
LCS 500-473442/2-A	Lab Control Sample	75							
LCSD 500-473442/3-A	Lab Control Sample Dup	78							
MB 500-473442/1-A	Method Blank	70							

Surrogate Legend

DCPAA = DCAA

Method: 8151A - Herbicides (GC)

Lab Sample ID: MB 500-473442/1-A
Matrix: Water
Analysis Batch: 473535

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 473442

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.50		0.50	0.090	ug/L		02/22/19 09:03	02/23/19 05:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCAA	*70*		*25 - 130*	*02/22/19 09:03*	*02/23/19 05:44*	*1*

Lab Sample ID: LCS 500-473442/2-A
Matrix: Water
Analysis Batch: 473535

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 473442

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Pentachlorophenol			2.53	1.19		ug/L		47	40 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCAA	*75*		*25 - 130*

Lab Sample ID: LCSD 500-473442/3-A
Matrix: Water
Analysis Batch: 473535

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 473442

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pentachlorophenol			2.53	1.51	*	ug/L		60	40 - 122	23	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
DCAA	*78*		*25 - 130*

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-18B
Date Collected: 02/19/19 12:05
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 06:58	JBJ	TAL CHI

Client Sample ID: MW-19
Date Collected: 02/19/19 09:45
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 07:22	JBJ	TAL CHI

Client Sample ID: MW-30
Date Collected: 02/19/19 15:50
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 07:46	JBJ	TAL CHI

Client Sample ID: MW-22
Date Collected: 02/18/19 12:05
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		25	473535	02/25/19 11:31	JBJ	TAL CHI

Client Sample ID: MW-23
Date Collected: 02/18/19 14:25
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 08:35	JBJ	TAL CHI

Client Sample ID: MW-24
Date Collected: 02/18/19 10:20
Date Received: 02/20/19 11:00

Lab Sample ID: 500-158986-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 09:00	JBJ	TAL CHI

Lab Chronicle

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Client Sample ID: MW-14A

Lab Sample ID: 500-158986-7

Date Collected: 02/20/19 11:35
Matrix: Water
Date Received: 02/21/19 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 09:24	JBJ	TAL CHI

Client Sample ID: MW-15

Lab Sample ID: 500-158986-8

Date Collected: 02/20/19 12:40
Matrix: Water
Date Received: 02/21/19 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 10:38	JBJ	TAL CHI

Client Sample ID: MW-27

Lab Sample ID: 500-158986-9

Date Collected: 02/20/19 08:10
Matrix: Water
Date Received: 02/21/19 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			473442	02/22/19 09:03	JVD	TAL CHI
Total/NA	Analysis	8151A		1	473535	02/23/19 11:02	JBJ	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: Pace Analytical Services, LLC
Project/Site: Marsh Lumber

TestAmerica Job ID: 500-158986-1

Laboratory: TestAmerica Chicago

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
South Carolina	State Program	4	77001	04-30-19

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical	Billing Information: Trey Carter - Pace Analytical
Address: 9700 Kincey Ave Huntersville NC, 28078	
Report To: Trey Carter	Email To: Trey.Carter@PaceLabs.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Marsh Lumber	State: SC / County/City: Pamplico Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: 704-977-0941 Email: Trey.Carter@PaceLabs.com	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Gary Simcox	Purchase Order #: TC 18113 Quote #: 50015499-0 DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [✓] Yes [ ] No
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: _____ [ ] Hold: _____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [✓] No Analysis: _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

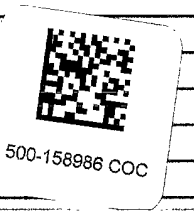
	Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Pentachlorophenol - 8151
1	MW-18B	GW	G	2/19/19	1205				2	X
2	MW-19	GW	G	2/19/19	0945				2	X
3	MW-30	GW	G	2/19/19	1550				2	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	(Y)	N	NA
Custody Signatures Present	(Y)	N	NA
Collector Signature Present	(Y)	N	NA
Bottles Intact	(Y)	N	NA
Correct Bottles	(Y)	N	NA
Sufficient Volume	(Y)	N	NA
Samples Received on Ice	(Y)	N	NA
VOA - Headspace Acceptable	Y	N	(NA)
USDA Regulated Soils	Y	N	(NA)
Samples in Holding Time	(Y)	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:
500-158986



Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 4.8
Temp Blank Received: Y (N) NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: 4.8 oC
Cooler 1 Therm Corr. Factor: 4.8 oC
Cooler 1 Corrected Temp: 4.8 oC
Comments:

	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	2/19/19 1700	Daniel Sandy TALS	02/20/19 1100
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N (NA)
HCL MeOH TSP Other

Non Conformance(s): YES / NO

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical	Billing Information: Trey Carter - Pace Analytical
Address: 9700 Kincey Ave Huntersville NC, 28078	
Report To: Trey Carter	Email To: Trey.Carter@PaceLabs.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Marsh Lumber	State: SC / County/City: Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: 704-977-0941 Email: Trey.Carter@PaceLabs.com	Site/Facility ID #: Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Ed Henriques	Purchase Order #: TC 18113 Quote #: 50015499-0 DW PWS ID #: DW Location Code:
Collected By (signature):	Turnaround Date Required: Standard Immediately Packed on Ice: [ ] Yes [ ] No
Sample Disposal: [✓] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply) Field Filtered (if applicable): [ ] Yes [ ] No Analysis:

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Pentachlorophenol - 8151
MW-22	GW	G	2/18/19	1205				2	X
MW-23	GW	G	2/18/19	1425				2	X
MW-24	GW	G	2/18/19	1020				2	X

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	(Y)	N	NA
Custody Signatures Present	(Y)	N	NA
Collector Signature Present	(Y)	N	NA
Bottles Intact	(Y)	N	NA
Correct Bottles	(Y)	N	NA
Sufficient Volume	(Y)	N	NA
Samples Received on Ice	(Y)	N	(NA)
VOA - Headspace Acceptable	Y	N	(NA)
USDA Regulated Soils	Y	N	(NA)
Samples in Holding Time	(Y)	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments: 786
500-158986 AS
02/20/19

500-158986 COC

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 2.2
Temp Blank Received: Y (N) NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: 2.2 oC
Cooler 1 Therm Corr. Factor: 2.2 oC
Cooler 1 Corrected Temp: 2.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Ed Henriques	2-19-19/0845	David Sauch TALLY	02/20/19 1100
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N (NA)
HCL MeOH TSP Other

Non Conformance(s): YES / NO

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CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical

Address: 9700 Kincey Ave Huntersville NC, 28078

Billing Information: Trey Carter - Pace Analytical

Report To: Trey Carter

Email To: Trey.Carter@PaceLabs.com

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: Marsh Lumber

State: SC / County/City: Time Zone Collected: [ ] PT [ ] MT [ ] CT [ ] ET

Phone: 704-977-0941
Email: Trey.Carter@PaceLabs.com

Site/Facility ID #:

Compliance Monitoring? [ ] Yes [ ] No

Collected By (print): Ed Henriques

Purchase Order #: TC 18113
Quote #: 50015499-0

DW PWS ID #:
DW Location Code:

Collected By (signature):

Turnaround Date Required: Standard

Immediately Packed on Ice: [ ] Yes [ ] No

Sample Disposal: [✓] Dispose as appropriate [ ] Return [ ] Archive: ____ [ ] Hold: ____

Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Field Filtered (if applicable): [ ] Yes [ ] No
Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses: Pentachlorophenol - 8151	Lab Sample # / Comments
4 MW-22	GW	G	2/18/19	1205				2	X	4
5 MW-23	GW	G	2/18/19	1425				2	X	5
6 MW-24	GW	G	2/18/19	1020				2	X	6

AS 02/20/19

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	(Y)	N	NA
Custody Signatures Present	(Y)	N	NA
Collector Signature Present	(Y)	N	NA
Bottles Intact	(Y)	N	NA
Correct Bottles	(Y)	N	NA
Sufficient Volume	(Y)	N	NA
Samples Received on Ice	(Y)	N	NA
VOA - Headspace Acceptable	Y	N	(NA)
USDA Regulated Soils	Y	N	(NA)
Samples in Holding Time	(Y)	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: ____			
Sample pH Acceptable	Y	N	NA
pH Strips: ____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: ____			

LAB USE ONLY:
Lab Sample # / Comments: 50015898 986 AS 02/20/19

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Packing Material Used:

Lab Tracking #:

Radchem sample(s) screened (<500 cpm): Y N NA

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 2.2
Temp Blank Received: Y (N) NA
Therm ID#:
Cooler 1 Temp Upon Receipt: 2.2 oC
Cooler 1 Therm Corr. Factor: 2.2 oC
Cooler 1 Corrected Temp: 2.2 oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Ed Henriques	2-19-19/0845	[signature] TAHB	02/20/19 1100

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N (NA)
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: of:

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

500-158986

ALL SHADED AREAS are for LAB USE ONLY

Company: Pace Analytical	Billing Information: Trey Carter - Pace Analytical
Address: 9700 Kincey Ave Huntersville NC, 28078	
Report To: Trey Carter	Email To: Trey.Carter@PaceLabs.com
Copy To:	Site Collection Info/Address:
Customer Project Name/Number: Marsh Lumber (500-158986 COC)	State: SC / County/City: Pamlico Time Zone Collected: [ ] PT [ ] MT [ ] CT [x] ET
Phone: 704-977-0941 Email: Trey.Carter@PaceLabs.com	Site/Facility ID #:
Collected By (print): Gary Simcox	Purchase Order #: TC 18113 Quote #: 50015499-0
Collected By (signature):	Turnaround Date Required: Standard
Sample Disposal: [ ] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [x] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [x] No

Analysis:

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Pentachlorophenol - 8151
7 MW-14A	GW	G	2/20/19	1135				2	X
8 MW-15	GW	G	2/20/19	1240				2	X
9 MW-27	GW	G	2/20/19	0810				2	X

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info: 3.6
Temp Blank Received: Y N NA
Therm ID#:
Cooler 1 Temp Upon Receipt: oC
Cooler 1 Therm Corr. Factor: oC
Cooler 1 Corrected Temp: oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
	2/20/19 1800	TA-CRL	2/21/19 0915
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: of:

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 92418293 **Workorder Name:** Marsh Lumber **Results Requested By:** 2/27/2019

Report / Invoice To	Subcontract To
Trey Carter Pace Analytical Charlotte 9800 Kincey Ave. Suite 100 Huntersville, NC 28078 Phone (704)875-9092 Email: trey.carter@pacelabs.com	TestAmerica Chicago, IL P.O.__TC 18120_____

State of Sample Origin: SC

Item	Sample ID	Collect Date/Time	Lab ID	Matrix	Preserved Containers: General	Preserved Containers: Unpreserved	Requested Analysis: Pentachlorophenol by 8151	LAB USE ONLY
1	MW-22	2/18/2019 12:05	92418293005	Water		2	X	
2	MW-23	2/18/2019 14:25	92418293006	Water		2	X	
3	MW-24	2/18/2019 10:20	92418293007	Water		2	X	
4	MW-18B	2/19/2019 12:05	92418293008	Water		2	X	
5	MW-19	2/19/2019 19:45	92418293009	Water		2	X	
6	MW-30	2/19/2019 15:50	92418293010	Water		2	X	

Transfers	Released By	Date/Time	Received By	Date/Time
1				
2				
3				

Comments

Quote# 50015499

Cooler Temperature on Receipt _____°C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

ORIGIN ID:SRWA (704) 875-9092
BRITTANY GARDNER
PACE ANALYTICAL SERVICES, INC.
9800 KINCEY AVE
SUITE 100
HUNTERSVILLE, NC 28078
UNITED STATES US

SHIP DATE: 19FEB19
ACTWGT: 15.00 LB MAN
CAD: 0050643/CAFE3211

BILL SENDER

TO

TEST AMERICA
2417 BOND ST

CHICAGO IL 604663182
(708) 534-5200
DEPT: MARKETIN /CLIENT SERVICE

FedEx Express

1 of 2

TRK# 0201 4830 8714 3715

MASTER

WED - 20 FEB 10:30A
PRIORITY OVERNIGHT

GE JOTA

60466
IL-US ORD

Part # 156148-434 RIT EXP 03/19

500-158986 Wayt

ORIGIN ID:SRWA (704) 875-9092
BRITTANY GARDNER
PACE ANALYTICAL SERVICES, INC.
9800 KINCEY AVE
SUITE 100
HUNTERSVILLE, NC 28078
UNITED STATES US

SHIP DATE: 19FEB19
ACTWGT: 15.00 LB MAN
CAD: 0050843/CAFE3211

BILL SENDER

TO

TEST AMERICA
2417 BOND ST

500-150986

CHICAGO IL 604663182
(708) 534-5200
DEPT: MARKETIN /CLIENT SERVICE

2/20/19

FedEx Express

2 of 2
MPS# 0289 4830 8714 3726
Mstr# 4830 8714 3715

WED - 20 FEB 10:30A
PRIORITY OVERNIGHT

0201

GE JOTA

60466
IL-US ORD

Part # 156148-434 RIT EXP 03/19


500-158986 Waybill
FedEx
MPS# 0263 4830 8714 3726
THU – 21 FEB 10:30A
PRIORITY OVERNIGHT
GE JOTA
60466
IL-US ORD
PEEL HERE
ALIGN OPEN END OF FEDEX AIRBILL POUCH HERE

Login Sample Receipt Checklist

Client: Pace Analytical Services, LLC

Job Number: 500-158986-1

Login Number: 158986
List Number: 1
Creator: Sanchez, Ariel M

List Source: TestAmerica Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.8, 2.2,3.6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

March 03, 2019

Mr. Ed Henriques
S&ME, Inc.
8646 West Market Street
Suite 105
Greensboro, NC 27409

RE: Project: Marsh Pamplico
Pace Project No.: 92418845

Dear Mr. Henriques:
Enclosed are the analytical results for sample(s) received by the laboratory on February 22, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angela M. Baioni

Angela Baioni
angela.baioni@pacelabs.com
(704)875-9092
Project Manager

Enclosures

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: Marsh Pamplico
Pace Project No.: 92418845

Charlotte Certification IDs

9800 Kincey Ave. Ste 100, Huntersville, NC 28078
Louisiana/NELAP Certification # LA170028
North Carolina Drinking Water Certification #: 37706
North Carolina Field Services Certification #: 5342
North Carolina Wastewater Certification #: 12
South Carolina Certification #: 99006001
Florida/NELAP Certification #: E87627
Kentucky UST Certification #: 84
Virginia/VELAP Certification #: 460221

Asheville Certification IDs

2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
Massachusetts Certification #: M-NC030
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: Marsh Pamplico
Pace Project No.: 92418845

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92418845001	**MW-13A**	Water	02/21/19 16:00	02/22/19 09:36
92418845002	**MW-14A**	Water	02/20/19 11:35	02/22/19 09:36
92418845003	**MW-21**	Water	02/21/19 12:00	02/22/19 09:36
92418845004	**MW-25**	Water	02/20/19 16:40	02/22/19 09:36
92418845005	**MW-26**	Water	02/21/19 08:35	02/22/19 09:36
92418845006	**MW-27**	Water	02/20/19 08:10	02/22/19 09:36
92418845007	**MW-28**	Water	02/21/19 10:20	02/22/19 09:36
92418845008	**MW-29**	Water	02/21/19 14:10	02/22/19 09:36
92418845009	**MW-30**	Water	02/19/19 15:50	02/22/19 09:36
92418845010	**MW-3A**	Water	02/18/19 16:55	02/22/19 09:36
92418845011	**MW-10**	Water	02/19/19 14:00	02/22/19 09:36
92418845012	**MW-15**	Water	02/20/19 12:40	02/22/19 09:36
92418845013	**MW-16**	Water	02/19/19 08:05	02/22/19 09:36
92418845014	**MW-18B**	Water	02/19/19 12:05	02/22/19 09:36
92418845015	**MW-19**	Water	02/19/19 09:45	02/22/19 09:36
92418845016	**MW-20**	Water	02/20/19 14:40	02/22/19 09:36

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Marsh Pamplico
Pace Project No.: 92418845

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92418845001	**MW-13A**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845002	**MW-14A**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845003	**MW-21**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845004	**MW-25**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845005	**MW-26**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845006	**MW-27**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845007	**MW-28**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845008	**MW-29**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845009	**MW-30**	EPA 8270D	BPJ	82	PASI-C
		SM 2320B-2011	ECH	1	PASI-A
		SM 4500-Cl-E-2011	GC	1	PASI-A
		SM 5310B-2011	ECH	1	PASI-A
92418845010	**MW-3A**	EPA 8270D	BPJ	82	PASI-C

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: Marsh Pamplico
Pace Project No.: 92418845

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92418845011	**MW-10**	EPA 8270D	BPJ	82	PASI-C
92418845012	**MW-15**	EPA 8270D	BPJ	82	PASI-C
92418845013	**MW-16**	EPA 8270D	BPJ	82	PASI-C
92418845014	**MW-18B**	EPA 8270D	BPJ	82	PASI-C
92418845015	**MW-19**	EPA 8270D	BPJ	82	PASI-C
92418845016	**MW-20**	EPA 8270D	BPJ	82	PASI-C

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Marsh Pamplico
Pace Project No.: 92418845

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Organic
Client: S&ME - Greensboro
Date: March 03, 2019

General Information:
16 samples were analyzed for EPA 8270D. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 459960

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2506312)
  - Atrazine

QC Batch: 460611

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2509037)
  - Atrazine

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Marsh Pamplico
Pace Project No.: 92418845

Method: **EPA 8270D**
Description: 8270 MSSV Semivolatile Organic
Client: S&ME - Greensboro
Date: March 03, 2019

QC Batch: 459960

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418293001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2506313)
  - Atrazine

QC Batch: 460314

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418845013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2507700)
  - Caprolactam

QC Batch: 460611

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418845004

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2509038)
  - Atrazine

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

PROJECT NARRATIVE

Project: Marsh Pamplico
Pace Project No.: 92418845

Method: **SM 2320B-2011**
Description: 2320B Alkalinity
Client: S&ME - Greensboro
Date: March 03, 2019

General Information:
9 samples were analyzed for SM 2320B-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 460141

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418327038,92418327048

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2506981)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 2506982)
  - Alkalinity, Total as CaCO3

QC Batch: 460142

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418845002,92418895001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 2506989)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 2506990)
  - Alkalinity, Total as CaCO3

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Marsh Pamplico
Pace Project No.: 92418845

Method: **SM 4500-Cl-E-2011**
Description: 4500 Chloride
Client: S&ME - Greensboro
Date: March 03, 2019

General Information:
9 samples were analyzed for SM 4500-Cl-E-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 460045

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 92418845008,92418961001

M6: Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

- MS (Lab ID: 2506659)
  - Chloride
- MSD (Lab ID: 2506660)
  - Chloride

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: Marsh Pamplico
Pace Project No.: 92418845

Method: **SM 5310B-2011**
Description: 5310B TOC
Client: S&ME - Greensboro
Date: March 03, 2019

General Information:
9 samples were analyzed for SM 5310B-2011. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-13A **Lab ID: 92418845001** Collected: 02/21/19 16:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 18:18	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/28/19 10:59	02/28/19 18:18	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 18:18	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/28/19 10:59	02/28/19 18:18	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/28/19 10:59	02/28/19 18:18	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 18:18	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 18:18	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 18:18	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 18:18	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 18:18	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/28/19 10:59	02/28/19 18:18	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/28/19 10:59	02/28/19 18:18	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/28/19 10:59	02/28/19 18:18	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/28/19 10:59	02/28/19 18:18	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 18:18	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 18:18	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 18:18	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 18:18	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 18:18	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 18:18	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/28/19 10:59	02/28/19 18:18	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 18:18	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/28/19 10:59	02/28/19 18:18	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/28/19 10:59	02/28/19 18:18	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/28/19 10:59	02/28/19 18:18	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 18:18	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-13A **Lab ID: 92418845001** Collected: 02/21/19 16:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 18:18	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 18:18	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 18:18	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/28/19 10:59	02/28/19 18:18	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/28/19 10:59	02/28/19 18:18	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/28/19 10:59	02/28/19 18:18	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/28/19 10:59	02/28/19 18:18	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 18:18	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 18:18	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/28/19 10:59	02/28/19 18:18	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 18:18	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 18:18	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 18:18	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 18:18	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/28/19 10:59	02/28/19 18:18	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 18:18	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 18:18	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	75	%	21-110		1	02/28/19 10:59	02/28/19 18:18	4165-60-0	
2-Fluorobiphenyl (S)	73	%	27-110		1	02/28/19 10:59	02/28/19 18:18	321-60-8	
Terphenyl-d14 (S)	81	%	31-107		1	02/28/19 10:59	02/28/19 18:18	1718-51-0	
Phenol-d6 (S)	31	%	10-110		1	02/28/19 10:59	02/28/19 18:18	13127-88-3	
2-Fluorophenol (S)	44	%	12-110		1	02/28/19 10:59	02/28/19 18:18	367-12-4	
2,4,6-Tribromophenol (S)	87	%	27-110		1	02/28/19 10:59	02/28/19 18:18	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**286**	mg/L	5.0	1.0	1		02/26/19 14:02		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**48.1**	mg/L	5.0	2.5	5		02/25/19 23:39	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**1.2**	mg/L	1.0	0.50	1		02/27/19 14:55	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-14A **Lab ID: 92418845002** Collected: 02/20/19 11:35 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 14:54	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/27/19 22:10	02/28/19 14:54	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 14:54	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/27/19 22:10	02/28/19 14:54	1912-24-9	L2
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/27/19 22:10	02/28/19 14:54	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 14:54	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 14:54	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 14:54	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 14:54	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 14:54	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/27/19 22:10	02/28/19 14:54	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/27/19 22:10	02/28/19 14:54	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/27/19 22:10	02/28/19 14:54	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/27/19 22:10	02/28/19 14:54	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 14:54	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 14:54	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 14:54	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 14:54	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 14:54	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 14:54	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 14:54	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/27/19 22:10	02/28/19 14:54	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 14:54	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/27/19 22:10	02/28/19 14:54	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/27/19 22:10	02/28/19 14:54	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/27/19 22:10	02/28/19 14:54	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 14:54	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-14A **Lab ID: 92418845002** Collected: 02/20/19 11:35 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 14:54	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 14:54	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 14:54	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 14:54	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/27/19 22:10	02/28/19 14:54	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/27/19 22:10	02/28/19 14:54	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/27/19 22:10	02/28/19 14:54	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/27/19 22:10	02/28/19 14:54	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 14:54	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 14:54	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/27/19 22:10	02/28/19 14:54	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 14:54	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 14:54	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 14:54	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 14:54	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/27/19 22:10	02/28/19 14:54	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 14:54	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 14:54	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	48	%	21-110		1	02/27/19 22:10	02/28/19 14:54	4165-60-0	
2-Fluorobiphenyl (S)	47	%	27-110		1	02/27/19 22:10	02/28/19 14:54	321-60-8	
Terphenyl-d14 (S)	76	%	31-107		1	02/27/19 22:10	02/28/19 14:54	1718-51-0	
Phenol-d6 (S)	20	%	10-110		1	02/27/19 22:10	02/28/19 14:54	13127-88-3	
2-Fluorophenol (S)	26	%	12-110		1	02/27/19 22:10	02/28/19 14:54	367-12-4	
2,4,6-Tribromophenol (S)	78	%	27-110		1	02/27/19 22:10	02/28/19 14:54	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**26.2**	mg/L	5.0	1.0	1		02/26/19 14:20		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**8.9**	mg/L	1.0	0.50	1		02/25/19 23:40	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**2.5**	mg/L	1.0	0.50	1		02/27/19 15:31	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-21 **Lab ID: 92418845003** Collected: 02/21/19 12:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	83-32-9	
Acenaphthylene	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	208-96-8	
Acetophenone	**<9.9**	ug/L	9.9	1.9	1	02/28/19 10:59	02/28/19 18:46	98-86-2	
Aniline	**<9.9**	ug/L	9.9	1.2	1	02/28/19 10:59	02/28/19 18:46	62-53-3	
Anthracene	**<9.9**	ug/L	9.9	1.7	1	02/28/19 10:59	02/28/19 18:46	120-12-7	
Atrazine	**<19.8**	ug/L	19.8	2.6	1	02/28/19 10:59	02/28/19 18:46	1912-24-9	L2
Benzaldehyde	**<19.8**	ug/L	19.8	1.2	1	02/28/19 10:59	02/28/19 18:46	100-52-7	
Benzo(a)anthracene	**<9.9**	ug/L	9.9	2.1	1	02/28/19 10:59	02/28/19 18:46	56-55-3	
Benzo(a)pyrene	**<9.9**	ug/L	9.9	2.2	1	02/28/19 10:59	02/28/19 18:46	50-32-8	
Benzo(b)fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/28/19 10:59	02/28/19 18:46	205-99-2	
Benzo(g,h,i)perylene	**<9.9**	ug/L	9.9	2.1	1	02/28/19 10:59	02/28/19 18:46	191-24-2	
Benzo(k)fluoranthene	**<9.9**	ug/L	9.9	2.0	1	02/28/19 10:59	02/28/19 18:46	207-08-9	
Benzoic Acid	**<49.5**	ug/L	49.5	5.0	1	02/28/19 10:59	02/28/19 18:46	65-85-0	
Benzyl alcohol	**<19.8**	ug/L	19.8	3.0	1	02/28/19 10:59	02/28/19 18:46	100-51-6	
Biphenyl (Diphenyl)	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	92-52-4	
4-Bromophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	101-55-3	
Butylbenzylphthalate	**<9.9**	ug/L	9.9	2.5	1	02/28/19 10:59	02/28/19 18:46	85-68-7	
Caprolactam	**<9.9**	ug/L	9.9	0.95	1	02/28/19 10:59	02/28/19 18:46	105-60-2	
Carbazole	**<9.9**	ug/L	9.9	1.9	1	02/28/19 10:59	02/28/19 18:46	86-74-8	
4-Chloro-3-methylphenol	**<19.8**	ug/L	19.8	2.8	1	02/28/19 10:59	02/28/19 18:46	59-50-7	
4-Chloroaniline	**<19.8**	ug/L	19.8	2.8	1	02/28/19 10:59	02/28/19 18:46	106-47-8	
bis(2-Chloroethoxy)methane	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	111-91-1	
bis(2-Chloroethyl) ether	**<9.9**	ug/L	9.9	1.7	1	02/28/19 10:59	02/28/19 18:46	111-44-4	
2-Chloronaphthalene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	91-58-7	
2-Chlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	95-57-8	
4-Chlorophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	7005-72-3	
Chrysene	**<9.9**	ug/L	9.9	2.1	1	02/28/19 10:59	02/28/19 18:46	218-01-9	
Dibenz(a,h)anthracene	**<9.9**	ug/L	9.9	2.0	1	02/28/19 10:59	02/28/19 18:46	53-70-3	
Dibenzofuran	**<9.9**	ug/L	9.9	1.7	1	02/28/19 10:59	02/28/19 18:46	132-64-9	
1,2-Dichlorobenzene	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	95-50-1	
1,3-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	541-73-1	
1,4-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	106-46-7	
3,3'-Dichlorobenzidine	**<19.8**	ug/L	19.8	3.8	1	02/28/19 10:59	02/28/19 18:46	91-94-1	
2,4-Dichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	120-83-2	
Diethylphthalate	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	84-66-2	
2,4-Dimethylphenol	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	105-67-9	
Dimethylphthalate	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	131-11-3	
Di-n-butylphthalate	**<9.9**	ug/L	9.9	2.0	1	02/28/19 10:59	02/28/19 18:46	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.8**	ug/L	19.8	2.2	1	02/28/19 10:59	02/28/19 18:46	534-52-1	
2,4-Dinitrophenol	**<49.5**	ug/L	49.5	5.0	1	02/28/19 10:59	02/28/19 18:46	51-28-5	
2,4-Dinitrotoluene	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	121-14-2	
2,6-Dinitrotoluene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	606-20-2	
Di-n-octylphthalate	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/28/19 10:59	02/28/19 18:46	117-81-7	
Fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/28/19 10:59	02/28/19 18:46	206-44-0	
Fluorene	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-21 **Lab ID: 92418845003** Collected: 02/21/19 12:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	87-68-3	
Hexachlorobenzene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	118-74-1	
Hexachlorocyclopentadiene	**<9.9**	ug/L	9.9	1.3	1	02/28/19 10:59	02/28/19 18:46	77-47-4	
Hexachloroethane	**<9.9**	ug/L	9.9	1.8	1	02/28/19 10:59	02/28/19 18:46	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.9**	ug/L	9.9	2.0	1	02/28/19 10:59	02/28/19 18:46	193-39-5	
Isophorone	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	78-59-1	
1-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	90-12-0	
2-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	91-57-6	
2-Methylphenol(o-Cresol)	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	15831-10-4	
Naphthalene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	91-20-3	
2-Nitroaniline	**<49.5**	ug/L	49.5	2.2	1	02/28/19 10:59	02/28/19 18:46	88-74-4	
3-Nitroaniline	**<49.5**	ug/L	49.5	2.6	1	02/28/19 10:59	02/28/19 18:46	99-09-2	
4-Nitroaniline	**<19.8**	ug/L	19.8	3.3	1	02/28/19 10:59	02/28/19 18:46	100-01-6	
Nitrobenzene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	98-95-3	
2-Nitrophenol	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	88-75-5	
4-Nitrophenol	**<49.5**	ug/L	49.5	4.2	1	02/28/19 10:59	02/28/19 18:46	100-02-7	
N-Nitrosodimethylamine	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	62-75-9	
N-Nitroso-di-n-propylamine	**<9.9**	ug/L	9.9	1.7	1	02/28/19 10:59	02/28/19 18:46	621-64-7	
N-Nitrosodiphenylamine	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.9**	ug/L	9.9	1.8	1	02/28/19 10:59	02/28/19 18:46	108-60-1	
Pentachlorophenol	**<24.8**	ug/L	24.8	3.5	1	02/28/19 10:59	02/28/19 18:46	87-86-5	
Phenanthrene	**<9.9**	ug/L	9.9	1.6	1	02/28/19 10:59	02/28/19 18:46	85-01-8	
Phenol	**<9.9**	ug/L	9.9	1.3	1	02/28/19 10:59	02/28/19 18:46	108-95-2	
Pyrene	**<9.9**	ug/L	9.9	2.2	1	02/28/19 10:59	02/28/19 18:46	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.9**	ug/L	9.9	1.3	1	02/28/19 10:59	02/28/19 18:46	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.9**	ug/L	9.9	2.9	1	02/28/19 10:59	02/28/19 18:46	58-90-2	
1,2,4-Trichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	120-82-1	
2,4,5-Trichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/28/19 10:59	02/28/19 18:46	95-95-4	
2,4,6-Trichlorophenol	**<9.9**	ug/L	9.9	1.4	1	02/28/19 10:59	02/28/19 18:46	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	76	%	21-110		1	02/28/19 10:59	02/28/19 18:46	4165-60-0	
2-Fluorobiphenyl (S)	74	%	27-110		1	02/28/19 10:59	02/28/19 18:46	321-60-8	
Terphenyl-d14 (S)	94	%	31-107		1	02/28/19 10:59	02/28/19 18:46	1718-51-0	
Phenol-d6 (S)	30	%	10-110		1	02/28/19 10:59	02/28/19 18:46	13127-88-3	
2-Fluorophenol (S)	44	%	12-110		1	02/28/19 10:59	02/28/19 18:46	367-12-4	
2,4,6-Tribromophenol (S)	87	%	27-110		1	02/28/19 10:59	02/28/19 18:46	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**58.5**	mg/L	5.0	1.0	1		02/26/19 14:47		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**7.3**	mg/L	1.0	0.50	1		02/25/19 23:41	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**4.1**	mg/L	1.0	0.50	1		02/27/19 15:46	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-25 **Lab ID: 92418845004** Collected: 02/20/19 16:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 15:23	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/27/19 22:10	02/28/19 15:23	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 15:23	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/27/19 22:10	02/28/19 15:23	1912-24-9	L2,M0
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/27/19 22:10	02/28/19 15:23	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 15:23	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 15:23	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 15:23	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 15:23	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 15:23	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/27/19 22:10	02/28/19 15:23	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/27/19 22:10	02/28/19 15:23	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/27/19 22:10	02/28/19 15:23	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/27/19 22:10	02/28/19 15:23	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 15:23	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 15:23	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 15:23	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 15:23	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 15:23	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 15:23	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 15:23	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/27/19 22:10	02/28/19 15:23	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 15:23	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/27/19 22:10	02/28/19 15:23	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/27/19 22:10	02/28/19 15:23	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/27/19 22:10	02/28/19 15:23	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 15:23	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-25 **Lab ID: 92418845004** Collected: 02/20/19 16:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 15:23	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 15:23	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 15:23	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 15:23	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/27/19 22:10	02/28/19 15:23	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/27/19 22:10	02/28/19 15:23	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/27/19 22:10	02/28/19 15:23	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/27/19 22:10	02/28/19 15:23	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 15:23	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 15:23	108-60-1	
Pentachlorophenol	**47.4**	ug/L	25.0	3.5	1	02/27/19 22:10	02/28/19 15:23	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 15:23	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 15:23	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 15:23	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 15:23	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/27/19 22:10	02/28/19 15:23	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 15:23	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 15:23	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	53	%	21-110		1	02/27/19 22:10	02/28/19 15:23	4165-60-0	
2-Fluorobiphenyl (S)	49	%	27-110		1	02/27/19 22:10	02/28/19 15:23	321-60-8	
Terphenyl-d14 (S)	41	%	31-107		1	02/27/19 22:10	02/28/19 15:23	1718-51-0	
Phenol-d6 (S)	17	%	10-110		1	02/27/19 22:10	02/28/19 15:23	13127-88-3	
2-Fluorophenol (S)	25	%	12-110		1	02/27/19 22:10	02/28/19 15:23	367-12-4	
2,4,6-Tribromophenol (S)	63	%	27-110		1	02/27/19 22:10	02/28/19 15:23	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**84.7**	mg/L	5.0	1.0	1		02/26/19 14:54		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**9.2**	mg/L	1.0	0.50	1		02/25/19 23:43	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**3.6**	mg/L	1.0	0.50	1		02/27/19 15:56	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-26 **Lab ID: 92418845005** Collected: 02/21/19 08:35 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 19:15	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/28/19 10:59	02/28/19 19:15	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:15	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/28/19 10:59	02/28/19 19:15	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/28/19 10:59	02/28/19 19:15	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 19:15	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:15	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 19:15	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:15	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:15	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/28/19 10:59	02/28/19 19:15	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/28/19 10:59	02/28/19 19:15	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/28/19 10:59	02/28/19 19:15	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/28/19 10:59	02/28/19 19:15	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:15	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 19:15	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 19:15	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:15	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:15	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:15	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/28/19 10:59	02/28/19 19:15	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 19:15	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/28/19 10:59	02/28/19 19:15	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/28/19 10:59	02/28/19 19:15	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/28/19 10:59	02/28/19 19:15	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:15	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-26 **Lab ID: 92418845005** Collected: 02/21/19 08:35 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:15	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:15	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:15	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/28/19 10:59	02/28/19 19:15	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/28/19 10:59	02/28/19 19:15	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/28/19 10:59	02/28/19 19:15	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/28/19 10:59	02/28/19 19:15	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:15	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:15	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/28/19 10:59	02/28/19 19:15	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:15	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:15	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:15	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:15	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/28/19 10:59	02/28/19 19:15	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:15	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:15	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	71	%	21-110		1	02/28/19 10:59	02/28/19 19:15	4165-60-0	
2-Fluorobiphenyl (S)	68	%	27-110		1	02/28/19 10:59	02/28/19 19:15	321-60-8	
Terphenyl-d14 (S)	76	%	31-107		1	02/28/19 10:59	02/28/19 19:15	1718-51-0	
Phenol-d6 (S)	27	%	10-110		1	02/28/19 10:59	02/28/19 19:15	13127-88-3	
2-Fluorophenol (S)	40	%	12-110		1	02/28/19 10:59	02/28/19 19:15	367-12-4	
2,4,6-Tribromophenol (S)	78	%	27-110		1	02/28/19 10:59	02/28/19 19:15	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**166**	mg/L	5.0	1.0	1		02/26/19 15:03		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**11.2**	mg/L	1.0	0.50	1		02/25/19 23:44	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**1.5**	mg/L	1.0	0.50	1		02/27/19 16:11	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-27 **Lab ID: 92418845006** Collected: 02/20/19 08:10 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 16:21	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/27/19 22:10	02/28/19 16:21	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:21	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/27/19 22:10	02/28/19 16:21	1912-24-9	L2
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/27/19 22:10	02/28/19 16:21	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:21	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:21	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:21	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:21	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:21	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/27/19 22:10	02/28/19 16:21	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/27/19 22:10	02/28/19 16:21	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/27/19 22:10	02/28/19 16:21	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/27/19 22:10	02/28/19 16:21	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 16:21	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 16:21	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 16:21	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:21	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:21	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:21	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:21	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/27/19 22:10	02/28/19 16:21	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:21	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/27/19 22:10	02/28/19 16:21	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/27/19 22:10	02/28/19 16:21	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/27/19 22:10	02/28/19 16:21	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:21	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-27 **Lab ID: 92418845006** Collected: 02/20/19 08:10 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:21	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:21	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 16:21	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:21	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/27/19 22:10	02/28/19 16:21	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/27/19 22:10	02/28/19 16:21	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/27/19 22:10	02/28/19 16:21	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/27/19 22:10	02/28/19 16:21	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:21	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 16:21	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/27/19 22:10	02/28/19 16:21	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:21	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:21	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:21	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:21	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/27/19 22:10	02/28/19 16:21	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:21	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:21	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	56	%	21-110		1	02/27/19 22:10	02/28/19 16:21	4165-60-0	
2-Fluorobiphenyl (S)	57	%	27-110		1	02/27/19 22:10	02/28/19 16:21	321-60-8	
Terphenyl-d14 (S)	83	%	31-107		1	02/27/19 22:10	02/28/19 16:21	1718-51-0	
Phenol-d6 (S)	20	%	10-110		1	02/27/19 22:10	02/28/19 16:21	13127-88-3	
2-Fluorophenol (S)	29	%	12-110		1	02/27/19 22:10	02/28/19 16:21	367-12-4	
2,4,6-Tribromophenol (S)	85	%	27-110		1	02/27/19 22:10	02/28/19 16:21	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**24.9**	mg/L	5.0	1.0	1		02/26/19 15:14		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**7.6**	mg/L	1.0	0.50	1		02/25/19 23:44	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**1.9**	mg/L	1.0	0.50	1		02/27/19 16:21	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-28 **Lab ID: 92418845007** Collected: 02/21/19 10:20 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 19:44	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/28/19 10:59	02/28/19 19:44	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:44	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/28/19 10:59	02/28/19 19:44	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/28/19 10:59	02/28/19 19:44	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 19:44	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:44	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	02/28/19 19:44	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:44	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:44	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/28/19 10:59	02/28/19 19:44	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/28/19 10:59	02/28/19 19:44	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/28/19 10:59	02/28/19 19:44	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/28/19 10:59	02/28/19 19:44	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:44	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 19:44	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	02/28/19 19:44	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:44	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:44	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:44	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/28/19 10:59	02/28/19 19:44	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	02/28/19 19:44	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/28/19 10:59	02/28/19 19:44	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/28/19 10:59	02/28/19 19:44	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/28/19 10:59	02/28/19 19:44	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:44	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-28 **Lab ID: 92418845007** Collected: 02/21/19 10:20 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:44	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:44	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	02/28/19 19:44	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/28/19 10:59	02/28/19 19:44	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/28/19 10:59	02/28/19 19:44	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/28/19 10:59	02/28/19 19:44	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/28/19 10:59	02/28/19 19:44	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	02/28/19 19:44	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	02/28/19 19:44	108-60-1	
Pentachlorophenol	**151**	ug/L	123	17.3	5	02/28/19 10:59	03/01/19 11:48	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	02/28/19 19:44	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:44	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	02/28/19 19:44	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	02/28/19 19:44	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/28/19 10:59	02/28/19 19:44	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	02/28/19 19:44	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	02/28/19 19:44	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	38	%	21-110		1	02/28/19 10:59	02/28/19 19:44	4165-60-0	
2-Fluorobiphenyl (S)	36	%	27-110		1	02/28/19 10:59	02/28/19 19:44	321-60-8	
Terphenyl-d14 (S)	62	%	31-107		1	02/28/19 10:59	02/28/19 19:44	1718-51-0	
Phenol-d6 (S)	15	%	10-110		1	02/28/19 10:59	02/28/19 19:44	13127-88-3	
2-Fluorophenol (S)	21	%	12-110		1	02/28/19 10:59	02/28/19 19:44	367-12-4	
2,4,6-Tribromophenol (S)	54	%	27-110		1	02/28/19 10:59	02/28/19 19:44	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**15.5**	mg/L	5.0	1.0	1		02/26/19 15:20		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**8.4**	mg/L	1.0	0.50	1		02/25/19 23:45	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**2.1**	mg/L	1.0	0.50	1		02/27/19 16:32	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-29 **Lab ID: 92418845008** Collected: 02/21/19 14:10 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	83-32-9	
Acenaphthylene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	208-96-8	
Acetophenone	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	03/01/19 10:40	98-86-2	
Aniline	**<9.8**	ug/L	9.8	1.2	1	02/28/19 10:59	03/01/19 10:40	62-53-3	
Anthracene	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	03/01/19 10:40	120-12-7	
Atrazine	**<19.6**	ug/L	19.6	2.6	1	02/28/19 10:59	03/01/19 10:40	1912-24-9	L2
Benzaldehyde	**<19.6**	ug/L	19.6	1.2	1	02/28/19 10:59	03/01/19 10:40	100-52-7	
Benzo(a)anthracene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	03/01/19 10:40	56-55-3	
Benzo(a)pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	03/01/19 10:40	50-32-8	
Benzo(b)fluoranthene	**<9.8**	ug/L	9.8	2.1	1	02/28/19 10:59	03/01/19 10:40	205-99-2	
Benzo(g,h,i)perylene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	03/01/19 10:40	191-24-2	
Benzo(k)fluoranthene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	03/01/19 10:40	207-08-9	
Benzoic Acid	**<49.0**	ug/L	49.0	4.9	1	02/28/19 10:59	03/01/19 10:40	65-85-0	
Benzyl alcohol	**<19.6**	ug/L	19.6	3.0	1	02/28/19 10:59	03/01/19 10:40	100-51-6	
Biphenyl (Diphenyl)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	92-52-4	
4-Bromophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	101-55-3	
Butylbenzylphthalate	**<9.8**	ug/L	9.8	2.4	1	02/28/19 10:59	03/01/19 10:40	85-68-7	
Caprolactam	**<9.8**	ug/L	9.8	0.94	1	02/28/19 10:59	03/01/19 10:40	105-60-2	
Carbazole	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	03/01/19 10:40	86-74-8	
4-Chloro-3-methylphenol	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	03/01/19 10:40	59-50-7	
4-Chloroaniline	**<19.6**	ug/L	19.6	2.8	1	02/28/19 10:59	03/01/19 10:40	106-47-8	
bis(2-Chloroethoxy)methane	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	111-91-1	
bis(2-Chloroethyl) ether	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	03/01/19 10:40	111-44-4	
2-Chloronaphthalene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	91-58-7	
2-Chlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	95-57-8	
4-Chlorophenylphenyl ether	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	7005-72-3	
Chrysene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	03/01/19 10:40	218-01-9	
Dibenz(a,h)anthracene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	03/01/19 10:40	53-70-3	
Dibenzofuran	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	132-64-9	
1,2-Dichlorobenzene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	95-50-1	
1,3-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	541-73-1	
1,4-Dichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	106-46-7	
3,3'-Dichlorobenzidine	**<19.6**	ug/L	19.6	3.8	1	02/28/19 10:59	03/01/19 10:40	91-94-1	
2,4-Dichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	120-83-2	
Diethylphthalate	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	84-66-2	
2,4-Dimethylphenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	105-67-9	
Dimethylphthalate	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	131-11-3	
Di-n-butylphthalate	**<9.8**	ug/L	9.8	1.9	1	02/28/19 10:59	03/01/19 10:40	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.6**	ug/L	19.6	2.2	1	02/28/19 10:59	03/01/19 10:40	534-52-1	
2,4-Dinitrophenol	**<49.0**	ug/L	49.0	5.0	1	02/28/19 10:59	03/01/19 10:40	51-28-5	
2,4-Dinitrotoluene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	121-14-2	
2,6-Dinitrotoluene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	606-20-2	
Di-n-octylphthalate	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/28/19 10:59	03/01/19 10:40	117-81-7	
Fluoranthene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	03/01/19 10:40	206-44-0	
Fluorene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-29 **Lab ID: 92418845008** Collected: 02/21/19 14:10 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	87-68-3	
Hexachlorobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	118-74-1	
Hexachlorocyclopentadiene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	03/01/19 10:40	77-47-4	
Hexachloroethane	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	03/01/19 10:40	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.8**	ug/L	9.8	2.0	1	02/28/19 10:59	03/01/19 10:40	193-39-5	
Isophorone	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	78-59-1	
1-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	90-12-0	
2-Methylnaphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	91-57-6	
2-Methylphenol(o-Cresol)	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	15831-10-4	
Naphthalene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	91-20-3	
2-Nitroaniline	**<49.0**	ug/L	49.0	2.2	1	02/28/19 10:59	03/01/19 10:40	88-74-4	
3-Nitroaniline	**<49.0**	ug/L	49.0	2.6	1	02/28/19 10:59	03/01/19 10:40	99-09-2	
4-Nitroaniline	**<19.6**	ug/L	19.6	3.3	1	02/28/19 10:59	03/01/19 10:40	100-01-6	
Nitrobenzene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	98-95-3	
2-Nitrophenol	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	88-75-5	
4-Nitrophenol	**<49.0**	ug/L	49.0	4.2	1	02/28/19 10:59	03/01/19 10:40	100-02-7	
N-Nitrosodimethylamine	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	62-75-9	
N-Nitroso-di-n-propylamine	**<9.8**	ug/L	9.8	1.7	1	02/28/19 10:59	03/01/19 10:40	621-64-7	
N-Nitrosodiphenylamine	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.8**	ug/L	9.8	1.8	1	02/28/19 10:59	03/01/19 10:40	108-60-1	
Pentachlorophenol	**<24.5**	ug/L	24.5	3.5	1	02/28/19 10:59	03/01/19 10:40	87-86-5	
Phenanthrene	**<9.8**	ug/L	9.8	1.6	1	02/28/19 10:59	03/01/19 10:40	85-01-8	
Phenol	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	03/01/19 10:40	108-95-2	
Pyrene	**<9.8**	ug/L	9.8	2.2	1	02/28/19 10:59	03/01/19 10:40	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.8**	ug/L	9.8	1.3	1	02/28/19 10:59	03/01/19 10:40	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.8**	ug/L	9.8	2.9	1	02/28/19 10:59	03/01/19 10:40	58-90-2	
1,2,4-Trichlorobenzene	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	120-82-1	
2,4,5-Trichlorophenol	**<9.8**	ug/L	9.8	1.5	1	02/28/19 10:59	03/01/19 10:40	95-95-4	
2,4,6-Trichlorophenol	**<9.8**	ug/L	9.8	1.4	1	02/28/19 10:59	03/01/19 10:40	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	79	%	21-110		1	02/28/19 10:59	03/01/19 10:40	4165-60-0	
2-Fluorobiphenyl (S)	75	%	27-110		1	02/28/19 10:59	03/01/19 10:40	321-60-8	
Terphenyl-d14 (S)	83	%	31-107		1	02/28/19 10:59	03/01/19 10:40	1718-51-0	
Phenol-d6 (S)	31	%	10-110		1	02/28/19 10:59	03/01/19 10:40	13127-88-3	
2-Fluorophenol (S)	44	%	12-110		1	02/28/19 10:59	03/01/19 10:40	367-12-4	
2,4,6-Tribromophenol (S)	89	%	27-110		1	02/28/19 10:59	03/01/19 10:40	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**160**	mg/L	5.0	1.0	1		02/26/19 15:25		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**5.8**	mg/L	1.0	0.50	1		02/25/19 23:46	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**1.4**	mg/L	1.0	0.50	1		02/27/19 16:42	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-30 **Lab ID: 92418845009** Collected: 02/19/19 15:50 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 12:34	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/26/19 23:01	02/27/19 12:34	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 12:34	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/26/19 23:01	02/27/19 12:34	1912-24-9	
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/26/19 23:01	02/27/19 12:34	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 12:34	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 12:34	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 12:34	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 12:34	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 12:34	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/26/19 23:01	02/27/19 12:34	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/26/19 23:01	02/27/19 12:34	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/26/19 23:01	02/27/19 12:34	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/26/19 23:01	02/27/19 12:34	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 12:34	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 12:34	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 12:34	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 12:34	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 12:34	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 12:34	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 12:34	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/26/19 23:01	02/27/19 12:34	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 12:34	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/26/19 23:01	02/27/19 12:34	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/26/19 23:01	02/27/19 12:34	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/26/19 23:01	02/27/19 12:34	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 12:34	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-30 **Lab ID: 92418845009** Collected: 02/19/19 15:50 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 12:34	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 12:34	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 12:34	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 12:34	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/26/19 23:01	02/27/19 12:34	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/26/19 23:01	02/27/19 12:34	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/26/19 23:01	02/27/19 12:34	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/26/19 23:01	02/27/19 12:34	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 12:34	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 12:34	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/26/19 23:01	02/27/19 12:34	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 12:34	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 12:34	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 12:34	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 12:34	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/26/19 23:01	02/27/19 12:34	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 12:34	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 12:34	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	71	%	21-110		1	02/26/19 23:01	02/27/19 12:34	4165-60-0	
2-Fluorobiphenyl (S)	60	%	27-110		1	02/26/19 23:01	02/27/19 12:34	321-60-8	
Terphenyl-d14 (S)	74	%	31-107		1	02/26/19 23:01	02/27/19 12:34	1718-51-0	
Phenol-d6 (S)	31	%	10-110		1	02/26/19 23:01	02/27/19 12:34	13127-88-3	
2-Fluorophenol (S)	43	%	12-110		1	02/26/19 23:01	02/27/19 12:34	367-12-4	
2,4,6-Tribromophenol (S)	79	%	27-110		1	02/26/19 23:01	02/27/19 12:34	118-79-6	
2320B Alkalinity	Analytical Method: SM 2320B-2011								
Alkalinity, Total as CaCO3	**295**	mg/L	5.0	1.0	1		02/26/19 15:35		
4500 Chloride	Analytical Method: SM 4500-Cl-E-2011								
Chloride	**18.8**	mg/L	1.0	0.50	1		02/25/19 23:48	16887-00-6	
5310B TOC	Analytical Method: SM 5310B-2011								
Total Organic Carbon	**2.8**	mg/L	1.0	0.50	1		02/27/19 17:16	7440-44-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-3A **Lab ID: 92418845010** Collected: 02/18/19 16:55 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	83-32-9	
Acenaphthylene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	208-96-8	
Acetophenone	**<9.9**	ug/L	9.9	1.9	1	02/25/19 16:02	02/26/19 17:24	98-86-2	
Aniline	**<9.9**	ug/L	9.9	1.2	1	02/25/19 16:02	02/26/19 17:24	62-53-3	
Anthracene	**<9.9**	ug/L	9.9	1.7	1	02/25/19 16:02	02/26/19 17:24	120-12-7	
Atrazine	**<19.8**	ug/L	19.8	2.6	1	02/25/19 16:02	02/26/19 17:24	1912-24-9	L2
Benzaldehyde	**<19.8**	ug/L	19.8	1.2	1	02/25/19 16:02	02/26/19 17:24	100-52-7	
Benzo(a)anthracene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 16:02	02/26/19 17:24	56-55-3	
Benzo(a)pyrene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 16:02	02/26/19 17:24	50-32-8	
Benzo(b)fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 16:02	02/26/19 17:24	205-99-2	
Benzo(g,h,i)perylene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 16:02	02/26/19 17:24	191-24-2	
Benzo(k)fluoranthene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 16:02	02/26/19 17:24	207-08-9	
Benzoic Acid	**<49.5**	ug/L	49.5	5.0	1	02/25/19 16:02	02/26/19 17:24	65-85-0	
Benzyl alcohol	**<19.8**	ug/L	19.8	3.0	1	02/25/19 16:02	02/26/19 17:24	100-51-6	
Biphenyl (Diphenyl)	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	92-52-4	
4-Bromophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	101-55-3	
Butylbenzylphthalate	**<9.9**	ug/L	9.9	2.5	1	02/25/19 16:02	02/26/19 17:24	85-68-7	
Caprolactam	**<9.9**	ug/L	9.9	0.95	1	02/25/19 16:02	02/26/19 17:24	105-60-2	
Carbazole	**<9.9**	ug/L	9.9	1.9	1	02/25/19 16:02	02/26/19 17:24	86-74-8	
4-Chloro-3-methylphenol	**<19.8**	ug/L	19.8	2.8	1	02/25/19 16:02	02/26/19 17:24	59-50-7	
4-Chloroaniline	**<19.8**	ug/L	19.8	2.8	1	02/25/19 16:02	02/26/19 17:24	106-47-8	
bis(2-Chloroethoxy)methane	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	111-91-1	
bis(2-Chloroethyl) ether	**<9.9**	ug/L	9.9	1.7	1	02/25/19 16:02	02/26/19 17:24	111-44-4	
2-Chloronaphthalene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	91-58-7	
2-Chlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	95-57-8	
4-Chlorophenylphenyl ether	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	7005-72-3	
Chrysene	**<9.9**	ug/L	9.9	2.1	1	02/25/19 16:02	02/26/19 17:24	218-01-9	
Dibenz(a,h)anthracene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 16:02	02/26/19 17:24	53-70-3	
Dibenzofuran	**<9.9**	ug/L	9.9	1.7	1	02/25/19 16:02	02/26/19 17:24	132-64-9	
1,2-Dichlorobenzene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	95-50-1	
1,3-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	541-73-1	
1,4-Dichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	106-46-7	
3,3'-Dichlorobenzidine	**<19.8**	ug/L	19.8	3.8	1	02/25/19 16:02	02/26/19 17:24	91-94-1	
2,4-Dichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	120-83-2	
Diethylphthalate	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	84-66-2	
2,4-Dimethylphenol	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	105-67-9	
Dimethylphthalate	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	131-11-3	
Di-n-butylphthalate	**<9.9**	ug/L	9.9	2.0	1	02/25/19 16:02	02/26/19 17:24	84-74-2	
4,6-Dinitro-2-methylphenol	**<19.8**	ug/L	19.8	2.2	1	02/25/19 16:02	02/26/19 17:24	534-52-1	
2,4-Dinitrophenol	**<49.5**	ug/L	49.5	5.0	1	02/25/19 16:02	02/26/19 17:24	51-28-5	
2,4-Dinitrotoluene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	121-14-2	
2,6-Dinitrotoluene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	606-20-2	
Di-n-octylphthalate	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	117-84-0	
bis(2-Ethylhexyl)phthalate	**<5.9**	ug/L	5.9	2.3	1	02/25/19 16:02	02/26/19 17:24	117-81-7	
Fluoranthene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 16:02	02/26/19 17:24	206-44-0	
Fluorene	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-3A **Lab ID: 92418845010** Collected: 02/18/19 16:55 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	87-68-3	
Hexachlorobenzene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	118-74-1	
Hexachlorocyclopentadiene	**<9.9**	ug/L	9.9	1.3	1	02/25/19 16:02	02/26/19 17:24	77-47-4	
Hexachloroethane	**<9.9**	ug/L	9.9	1.8	1	02/25/19 16:02	02/26/19 17:24	67-72-1	
Indeno(1,2,3-cd)pyrene	**<9.9**	ug/L	9.9	2.0	1	02/25/19 16:02	02/26/19 17:24	193-39-5	
Isophorone	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	78-59-1	
1-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	90-12-0	
2-Methylnaphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	91-57-6	
2-Methylphenol(o-Cresol)	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	15831-10-4	
Naphthalene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	91-20-3	
2-Nitroaniline	**<49.5**	ug/L	49.5	2.2	1	02/25/19 16:02	02/26/19 17:24	88-74-4	
3-Nitroaniline	**<49.5**	ug/L	49.5	2.6	1	02/25/19 16:02	02/26/19 17:24	99-09-2	
4-Nitroaniline	**<19.8**	ug/L	19.8	3.3	1	02/25/19 16:02	02/26/19 17:24	100-01-6	
Nitrobenzene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	98-95-3	
2-Nitrophenol	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	88-75-5	
4-Nitrophenol	**<49.5**	ug/L	49.5	4.2	1	02/25/19 16:02	02/26/19 17:24	100-02-7	
N-Nitrosodimethylamine	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	62-75-9	
N-Nitroso-di-n-propylamine	**<9.9**	ug/L	9.9	1.7	1	02/25/19 16:02	02/26/19 17:24	621-64-7	
N-Nitrosodiphenylamine	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<9.9**	ug/L	9.9	1.8	1	02/25/19 16:02	02/26/19 17:24	108-60-1	
Pentachlorophenol	**<24.8**	ug/L	24.8	3.5	1	02/25/19 16:02	02/26/19 17:24	87-86-5	
Phenanthrene	**<9.9**	ug/L	9.9	1.6	1	02/25/19 16:02	02/26/19 17:24	85-01-8	
Phenol	**<9.9**	ug/L	9.9	1.3	1	02/25/19 16:02	02/26/19 17:24	108-95-2	
Pyrene	**<9.9**	ug/L	9.9	2.2	1	02/25/19 16:02	02/26/19 17:24	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<9.9**	ug/L	9.9	1.3	1	02/25/19 16:02	02/26/19 17:24	95-94-3	
2,3,4,6-Tetrachlorophenol	**<9.9**	ug/L	9.9	2.9	1	02/25/19 16:02	02/26/19 17:24	58-90-2	
1,2,4-Trichlorobenzene	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	120-82-1	
2,4,5-Trichlorophenol	**<9.9**	ug/L	9.9	1.5	1	02/25/19 16:02	02/26/19 17:24	95-95-4	
2,4,6-Trichlorophenol	**<9.9**	ug/L	9.9	1.4	1	02/25/19 16:02	02/26/19 17:24	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	45	%	21-110		1	02/25/19 16:02	02/26/19 17:24	4165-60-0	
2-Fluorobiphenyl (S)	43	%	27-110		1	02/25/19 16:02	02/26/19 17:24	321-60-8	
Terphenyl-d14 (S)	64	%	31-107		1	02/25/19 16:02	02/26/19 17:24	1718-51-0	
Phenol-d6 (S)	22	%	10-110		1	02/25/19 16:02	02/26/19 17:24	13127-88-3	
2-Fluorophenol (S)	29	%	12-110		1	02/25/19 16:02	02/26/19 17:24	367-12-4	
2,4,6-Tribromophenol (S)	59	%	27-110		1	02/25/19 16:02	02/26/19 17:24	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-10 **Lab ID: 92418845011** Collected: 02/19/19 14:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 13:03	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/26/19 23:01	02/27/19 13:03	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:03	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/26/19 23:01	02/27/19 13:03	1912-24-9	
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/26/19 23:01	02/27/19 13:03	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:03	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:03	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:03	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:03	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:03	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/26/19 23:01	02/27/19 13:03	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/26/19 23:01	02/27/19 13:03	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/26/19 23:01	02/27/19 13:03	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/26/19 23:01	02/27/19 13:03	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 13:03	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 13:03	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 13:03	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:03	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:03	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:03	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:03	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/26/19 23:01	02/27/19 13:03	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:03	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/26/19 23:01	02/27/19 13:03	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/26/19 23:01	02/27/19 13:03	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/26/19 23:01	02/27/19 13:03	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:03	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-10 **Lab ID: 92418845011** Collected: 02/19/19 14:00 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:03	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:03	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 13:03	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:03	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/26/19 23:01	02/27/19 13:03	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/26/19 23:01	02/27/19 13:03	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/26/19 23:01	02/27/19 13:03	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/26/19 23:01	02/27/19 13:03	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:03	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 13:03	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/26/19 23:01	02/27/19 13:03	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:03	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:03	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:03	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:03	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/26/19 23:01	02/27/19 13:03	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:03	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:03	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	70	%	21-110		1	02/26/19 23:01	02/27/19 13:03	4165-60-0	
2-Fluorobiphenyl (S)	59	%	27-110		1	02/26/19 23:01	02/27/19 13:03	321-60-8	
Terphenyl-d14 (S)	81	%	31-107		1	02/26/19 23:01	02/27/19 13:03	1718-51-0	
Phenol-d6 (S)	29	%	10-110		1	02/26/19 23:01	02/27/19 13:03	13127-88-3	
2-Fluorophenol (S)	41	%	12-110		1	02/26/19 23:01	02/27/19 13:03	367-12-4	
2,4,6-Tribromophenol (S)	75	%	27-110		1	02/26/19 23:01	02/27/19 13:03	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-15 **Lab ID: 92418845012** Collected: 02/20/19 12:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 16:50	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/27/19 22:10	02/28/19 16:50	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:50	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/27/19 22:10	02/28/19 16:50	1912-24-9	L2
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/27/19 22:10	02/28/19 16:50	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:50	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:50	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:50	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:50	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:50	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/27/19 22:10	02/28/19 16:50	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/27/19 22:10	02/28/19 16:50	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/27/19 22:10	02/28/19 16:50	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/27/19 22:10	02/28/19 16:50	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 16:50	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 16:50	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 16:50	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:50	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 16:50	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:50	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:50	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/27/19 22:10	02/28/19 16:50	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:50	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/27/19 22:10	02/28/19 16:50	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/27/19 22:10	02/28/19 16:50	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/27/19 22:10	02/28/19 16:50	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:50	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-15 **Lab ID: 92418845012** Collected: 02/20/19 12:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:50	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:50	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 16:50	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 16:50	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/27/19 22:10	02/28/19 16:50	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/27/19 22:10	02/28/19 16:50	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/27/19 22:10	02/28/19 16:50	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/27/19 22:10	02/28/19 16:50	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 16:50	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 16:50	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/27/19 22:10	02/28/19 16:50	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 16:50	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:50	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 16:50	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 16:50	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/27/19 22:10	02/28/19 16:50	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 16:50	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 16:50	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	77	%	21-110		1	02/27/19 22:10	02/28/19 16:50	4165-60-0	
2-Fluorobiphenyl (S)	76	%	27-110		1	02/27/19 22:10	02/28/19 16:50	321-60-8	
Terphenyl-d14 (S)	85	%	31-107		1	02/27/19 22:10	02/28/19 16:50	1718-51-0	
Phenol-d6 (S)	28	%	10-110		1	02/27/19 22:10	02/28/19 16:50	13127-88-3	
2-Fluorophenol (S)	40	%	12-110		1	02/27/19 22:10	02/28/19 16:50	367-12-4	
2,4,6-Tribromophenol (S)	101	%	27-110		1	02/27/19 22:10	02/28/19 16:50	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-16 **Lab ID: 92418845013** Collected: 02/19/19 08:05 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 13:32	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/26/19 23:01	02/27/19 13:32	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:32	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/26/19 23:01	02/27/19 13:32	1912-24-9	
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/26/19 23:01	02/27/19 13:32	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:32	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:32	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:32	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:32	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:32	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/26/19 23:01	02/27/19 13:32	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/26/19 23:01	02/27/19 13:32	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/26/19 23:01	02/27/19 13:32	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/26/19 23:01	02/27/19 13:32	105-60-2	M1
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 13:32	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 13:32	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 13:32	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:32	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 13:32	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:32	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:32	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/26/19 23:01	02/27/19 13:32	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:32	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/26/19 23:01	02/27/19 13:32	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/26/19 23:01	02/27/19 13:32	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/26/19 23:01	02/27/19 13:32	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:32	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	86-73-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-16 **Lab ID: 92418845013** Collected: 02/19/19 08:05 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:32	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:32	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 13:32	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 13:32	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/26/19 23:01	02/27/19 13:32	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/26/19 23:01	02/27/19 13:32	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/26/19 23:01	02/27/19 13:32	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/26/19 23:01	02/27/19 13:32	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 13:32	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 13:32	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/26/19 23:01	02/27/19 13:32	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 13:32	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:32	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 13:32	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 13:32	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/26/19 23:01	02/27/19 13:32	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 13:32	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 13:32	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	77	%	21-110		1	02/26/19 23:01	02/27/19 13:32	4165-60-0	
2-Fluorobiphenyl (S)	64	%	27-110		1	02/26/19 23:01	02/27/19 13:32	321-60-8	
Terphenyl-d14 (S)	82	%	31-107		1	02/26/19 23:01	02/27/19 13:32	1718-51-0	
Phenol-d6 (S)	32	%	10-110		1	02/26/19 23:01	02/27/19 13:32	13127-88-3	
2-Fluorophenol (S)	45	%	12-110		1	02/26/19 23:01	02/27/19 13:32	367-12-4	
2,4,6-Tribromophenol (S)	78	%	27-110		1	02/26/19 23:01	02/27/19 13:32	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-18B **Lab ID: 92418845014** Collected: 02/19/19 12:05 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 14:29	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/26/19 23:01	02/27/19 14:29	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:29	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/26/19 23:01	02/27/19 14:29	1912-24-9	
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/26/19 23:01	02/27/19 14:29	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:29	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:29	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:29	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:29	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:29	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/26/19 23:01	02/27/19 14:29	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/26/19 23:01	02/27/19 14:29	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/26/19 23:01	02/27/19 14:29	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/26/19 23:01	02/27/19 14:29	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 14:29	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 14:29	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 14:29	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:29	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:29	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:29	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:29	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/26/19 23:01	02/27/19 14:29	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:29	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/26/19 23:01	02/27/19 14:29	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/26/19 23:01	02/27/19 14:29	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/26/19 23:01	02/27/19 14:29	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:29	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-18B **Lab ID: 92418845014** Collected: 02/19/19 12:05 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:29	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:29	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 14:29	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:29	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/26/19 23:01	02/27/19 14:29	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/26/19 23:01	02/27/19 14:29	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/26/19 23:01	02/27/19 14:29	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/26/19 23:01	02/27/19 14:29	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:29	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 14:29	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/26/19 23:01	02/27/19 14:29	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:29	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:29	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:29	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:29	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/26/19 23:01	02/27/19 14:29	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:29	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:29	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	56	%	21-110		1	02/26/19 23:01	02/27/19 14:29	4165-60-0	
2-Fluorobiphenyl (S)	47	%	27-110		1	02/26/19 23:01	02/27/19 14:29	321-60-8	
Terphenyl-d14 (S)	59	%	31-107		1	02/26/19 23:01	02/27/19 14:29	1718-51-0	
Phenol-d6 (S)	23	%	10-110		1	02/26/19 23:01	02/27/19 14:29	13127-88-3	
2-Fluorophenol (S)	33	%	12-110		1	02/26/19 23:01	02/27/19 14:29	367-12-4	
2,4,6-Tribromophenol (S)	65	%	27-110		1	02/26/19 23:01	02/27/19 14:29	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-19 **Lab ID: 92418845015** Collected: 02/19/19 09:45 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 14:57	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/26/19 23:01	02/27/19 14:57	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:57	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/26/19 23:01	02/27/19 14:57	1912-24-9	
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/26/19 23:01	02/27/19 14:57	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:57	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:57	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:57	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:57	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:57	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/26/19 23:01	02/27/19 14:57	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/26/19 23:01	02/27/19 14:57	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/26/19 23:01	02/27/19 14:57	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/26/19 23:01	02/27/19 14:57	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/26/19 23:01	02/27/19 14:57	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 14:57	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/26/19 23:01	02/27/19 14:57	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:57	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/26/19 23:01	02/27/19 14:57	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:57	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:57	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/26/19 23:01	02/27/19 14:57	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:57	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/26/19 23:01	02/27/19 14:57	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/26/19 23:01	02/27/19 14:57	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/26/19 23:01	02/27/19 14:57	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:57	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-19 **Lab ID: 92418845015** Collected: 02/19/19 09:45 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:57	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:57	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 14:57	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/26/19 23:01	02/27/19 14:57	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/26/19 23:01	02/27/19 14:57	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/26/19 23:01	02/27/19 14:57	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/26/19 23:01	02/27/19 14:57	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/26/19 23:01	02/27/19 14:57	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/26/19 23:01	02/27/19 14:57	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/26/19 23:01	02/27/19 14:57	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/26/19 23:01	02/27/19 14:57	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/26/19 23:01	02/27/19 14:57	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:57	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/26/19 23:01	02/27/19 14:57	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/26/19 23:01	02/27/19 14:57	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/26/19 23:01	02/27/19 14:57	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/26/19 23:01	02/27/19 14:57	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/26/19 23:01	02/27/19 14:57	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	76	%	21-110		1	02/26/19 23:01	02/27/19 14:57	4165-60-0	
2-Fluorobiphenyl (S)	71	%	27-110		1	02/26/19 23:01	02/27/19 14:57	321-60-8	
Terphenyl-d14 (S)	64	%	31-107		1	02/26/19 23:01	02/27/19 14:57	1718-51-0	
Phenol-d6 (S)	34	%	10-110		1	02/26/19 23:01	02/27/19 14:57	13127-88-3	
2-Fluorophenol (S)	46	%	12-110		1	02/26/19 23:01	02/27/19 14:57	367-12-4	
2,4,6-Tribromophenol (S)	82	%	27-110		1	02/26/19 23:01	02/27/19 14:57	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-20 **Lab ID: 92418845016** Collected: 02/20/19 14:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Acenaphthene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	83-32-9	
Acenaphthylene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	208-96-8	
Acetophenone	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 17:48	98-86-2	
Aniline	**<10.0**	ug/L	10.0	1.2	1	02/27/19 22:10	02/28/19 17:48	62-53-3	
Anthracene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 17:48	120-12-7	
Atrazine	**<20.0**	ug/L	20.0	2.6	1	02/27/19 22:10	02/28/19 17:48	1912-24-9	L2
Benzaldehyde	**<20.0**	ug/L	20.0	1.3	1	02/27/19 22:10	02/28/19 17:48	100-52-7	
Benzo(a)anthracene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 17:48	56-55-3	
Benzo(a)pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 17:48	50-32-8	
Benzo(b)fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 17:48	205-99-2	
Benzo(g,h,i)perylene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 17:48	191-24-2	
Benzo(k)fluoranthene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 17:48	207-08-9	
Benzoic Acid	**<50.0**	ug/L	50.0	5.0	1	02/27/19 22:10	02/28/19 17:48	65-85-0	
Benzyl alcohol	**<20.0**	ug/L	20.0	3.1	1	02/27/19 22:10	02/28/19 17:48	100-51-6	
Biphenyl (Diphenyl)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	92-52-4	
4-Bromophenylphenyl ether	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	101-55-3	
Butylbenzylphthalate	**<10.0**	ug/L	10.0	2.5	1	02/27/19 22:10	02/28/19 17:48	85-68-7	
Caprolactam	**<10.0**	ug/L	10.0	0.96	1	02/27/19 22:10	02/28/19 17:48	105-60-2	
Carbazole	**<10.0**	ug/L	10.0	1.9	1	02/27/19 22:10	02/28/19 17:48	86-74-8	
4-Chloro-3-methylphenol	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 17:48	59-50-7	
4-Chloroaniline	**<20.0**	ug/L	20.0	2.8	1	02/27/19 22:10	02/28/19 17:48	106-47-8	
bis(2-Chloroethoxy)methane	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	111-91-1	
bis(2-Chloroethyl) ether	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 17:48	111-44-4	
2-Chloronaphthalene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	91-58-7	
2-Chlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	95-57-8	
4-Chlorophenylphenyl ether	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	7005-72-3	
Chrysene	**<10.0**	ug/L	10.0	2.1	1	02/27/19 22:10	02/28/19 17:48	218-01-9	
Dibenz(a,h)anthracene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 17:48	53-70-3	
Dibenzofuran	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 17:48	132-64-9	
1,2-Dichlorobenzene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	95-50-1	
1,3-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	541-73-1	
1,4-Dichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	106-46-7	
3,3'-Dichlorobenzidine	**<20.0**	ug/L	20.0	3.9	1	02/27/19 22:10	02/28/19 17:48	91-94-1	
2,4-Dichlorophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	120-83-2	
Diethylphthalate	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	84-66-2	
2,4-Dimethylphenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	105-67-9	
Dimethylphthalate	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	131-11-3	
Di-n-butylphthalate	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 17:48	84-74-2	
4,6-Dinitro-2-methylphenol	**<20.0**	ug/L	20.0	2.2	1	02/27/19 22:10	02/28/19 17:48	534-52-1	
2,4-Dinitrophenol	**<50.0**	ug/L	50.0	5.1	1	02/27/19 22:10	02/28/19 17:48	51-28-5	
2,4-Dinitrotoluene	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	121-14-2	
2,6-Dinitrotoluene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	606-20-2	
Di-n-octylphthalate	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	117-84-0	
bis(2-Ethylhexyl)phthalate	**<6.0**	ug/L	6.0	2.3	1	02/27/19 22:10	02/28/19 17:48	117-81-7	
Fluoranthene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 17:48	206-44-0	
Fluorene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	86-73-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS

Project: Marsh Pamplico
Pace Project No.: 92418845

Sample: MW-20 **Lab ID: 92418845016** Collected: 02/20/19 14:40 Received: 02/22/19 09:36 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV Semivolatile Organic	Analytical Method: EPA 8270D Preparation Method: EPA 3510C								
Hexachloro-1,3-butadiene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	87-68-3	
Hexachlorobenzene	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 17:48	118-74-1	
Hexachlorocyclopentadiene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 17:48	77-47-4	
Hexachloroethane	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 17:48	67-72-1	
Indeno(1,2,3-cd)pyrene	**<10.0**	ug/L	10.0	2.0	1	02/27/19 22:10	02/28/19 17:48	193-39-5	
Isophorone	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	78-59-1	
1-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	90-12-0	
2-Methylnaphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	91-57-6	
2-Methylphenol(o-Cresol)	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	15831-10-4	
Naphthalene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	91-20-3	
2-Nitroaniline	**<50.0**	ug/L	50.0	2.3	1	02/27/19 22:10	02/28/19 17:48	88-74-4	
3-Nitroaniline	**<50.0**	ug/L	50.0	2.7	1	02/27/19 22:10	02/28/19 17:48	99-09-2	
4-Nitroaniline	**<20.0**	ug/L	20.0	3.4	1	02/27/19 22:10	02/28/19 17:48	100-01-6	
Nitrobenzene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	98-95-3	
2-Nitrophenol	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	88-75-5	
4-Nitrophenol	**<50.0**	ug/L	50.0	4.3	1	02/27/19 22:10	02/28/19 17:48	100-02-7	
N-Nitrosodimethylamine	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	62-75-9	
N-Nitroso-di-n-propylamine	**<10.0**	ug/L	10.0	1.7	1	02/27/19 22:10	02/28/19 17:48	621-64-7	
N-Nitrosodiphenylamine	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	86-30-6	
2,2'-Oxybis(1-chloropropane)	**<10.0**	ug/L	10.0	1.8	1	02/27/19 22:10	02/28/19 17:48	108-60-1	
Pentachlorophenol	**<25.0**	ug/L	25.0	3.5	1	02/27/19 22:10	02/28/19 17:48	87-86-5	
Phenanthrene	**<10.0**	ug/L	10.0	1.6	1	02/27/19 22:10	02/28/19 17:48	85-01-8	
Phenol	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 17:48	108-95-2	
Pyrene	**<10.0**	ug/L	10.0	2.2	1	02/27/19 22:10	02/28/19 17:48	129-00-0	
1,2,4,5-Tetrachlorobenzene	**<10.0**	ug/L	10.0	1.3	1	02/27/19 22:10	02/28/19 17:48	95-94-3	
2,3,4,6-Tetrachlorophenol	**<10.0**	ug/L	10.0	2.9	1	02/27/19 22:10	02/28/19 17:48	58-90-2	
1,2,4-Trichlorobenzene	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	120-82-1	
2,4,5-Trichlorophenol	**<10.0**	ug/L	10.0	1.5	1	02/27/19 22:10	02/28/19 17:48	95-95-4	
2,4,6-Trichlorophenol	**<10.0**	ug/L	10.0	1.4	1	02/27/19 22:10	02/28/19 17:48	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	87	%	21-110		1	02/27/19 22:10	02/28/19 17:48	4165-60-0	
2-Fluorobiphenyl (S)	83	%	27-110		1	02/27/19 22:10	02/28/19 17:48	321-60-8	
Terphenyl-d14 (S)	91	%	31-107		1	02/27/19 22:10	02/28/19 17:48	1718-51-0	
Phenol-d6 (S)	33	%	10-110		1	02/27/19 22:10	02/28/19 17:48	13127-88-3	
2-Fluorophenol (S)	47	%	12-110		1	02/27/19 22:10	02/28/19 17:48	367-12-4	
2,4,6-Tribromophenol (S)	97	%	27-110		1	02/27/19 22:10	02/28/19 17:48	118-79-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 459960
QC Batch Method: EPA 3510C
Analysis Method: EPA 8270D
Analysis Description: 8270 Water MSSV
Associated Lab Samples: 92418845010

METHOD BLANK: 2506311
Matrix: Water
Associated Lab Samples: 92418845010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
1,2,4-Trichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1,2-Dichlorobenzene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
1,3-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1,4-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
1-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	10.0	1.8	02/26/19 12:35	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	10.0	2.9	02/26/19 12:35	
2,4,5-Trichlorophenol	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2,4,6-Trichlorophenol	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2,4-Dichlorophenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2,4-Dimethylphenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2,4-Dinitrophenol	ug/L	<50.0	50.0	5.1	02/26/19 12:35	
2,4-Dinitrotoluene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2,6-Dinitrotoluene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2-Chloronaphthalene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2-Chlorophenol	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
2-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
2-Nitroaniline	ug/L	<50.0	50.0	2.3	02/26/19 12:35	
2-Nitrophenol	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
3,3'-Dichlorobenzidine	ug/L	<20.0	20.0	3.9	02/26/19 12:35	
3-Nitroaniline	ug/L	<50.0	50.0	2.7	02/26/19 12:35	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	2.2	02/26/19 12:35	
4-Bromophenylphenyl ether	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
4-Chloro-3-methylphenol	ug/L	<20.0	20.0	2.8	02/26/19 12:35	
4-Chloroaniline	ug/L	<20.0	20.0	2.8	02/26/19 12:35	
4-Chlorophenylphenyl ether	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
4-Nitroaniline	ug/L	<20.0	20.0	3.4	02/26/19 12:35	
4-Nitrophenol	ug/L	<50.0	50.0	4.3	02/26/19 12:35	
Acenaphthene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Acenaphthylene	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
Acetophenone	ug/L	<10.0	10.0	1.9	02/26/19 12:35	
Aniline	ug/L	<10.0	10.0	1.2	02/26/19 12:35	
Anthracene	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Atrazine	ug/L	<20.0	20.0	2.6	02/26/19 12:35	
Benzaldehyde	ug/L	<20.0	20.0	1.3	02/26/19 12:35	
Benzo(a)anthracene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Benzo(a)pyrene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
Benzo(b)fluoranthene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

METHOD BLANK: 2506311 Matrix: Water
Associated Lab Samples: 92418845010

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(g,h,i)perylene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Benzo(k)fluoranthene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Benzoic Acid	ug/L	<50.0	50.0	5.0	02/26/19 12:35	
Benzyl alcohol	ug/L	<20.0	20.0	3.1	02/26/19 12:35	
Biphenyl (Diphenyl)	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
bis(2-Chloroethoxy)methane	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
bis(2-Chloroethyl) ether	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	6.0	2.3	02/26/19 12:35	
Butylbenzylphthalate	ug/L	<10.0	10.0	2.5	02/26/19 12:35	
Caprolactam	ug/L	<10.0	10.0	0.96	02/26/19 12:35	
Carbazole	ug/L	<10.0	10.0	1.9	02/26/19 12:35	
Chrysene	ug/L	<10.0	10.0	2.1	02/26/19 12:35	
Di-n-butylphthalate	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Di-n-octylphthalate	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
Dibenz(a,h)anthracene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Dibenzofuran	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Diethylphthalate	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Dimethylphthalate	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Fluoranthene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
Fluorene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Hexachloro-1,3-butadiene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Hexachlorobenzene	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
Hexachlorocyclopentadiene	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
Hexachloroethane	ug/L	<10.0	10.0	1.8	02/26/19 12:35	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	10.0	2.0	02/26/19 12:35	
Isophorone	ug/L	<10.0	10.0	1.5	02/26/19 12:35	
N-Nitroso-di-n-propylamine	ug/L	<10.0	10.0	1.7	02/26/19 12:35	
N-Nitrosodimethylamine	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
N-Nitrosodiphenylamine	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Naphthalene	ug/L	<10.0	10.0	1.4	02/26/19 12:35	
Nitrobenzene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Pentachlorophenol	ug/L	<25.0	25.0	3.5	02/26/19 12:35	
Phenanthrene	ug/L	<10.0	10.0	1.6	02/26/19 12:35	
Phenol	ug/L	<10.0	10.0	1.3	02/26/19 12:35	
Pyrene	ug/L	<10.0	10.0	2.2	02/26/19 12:35	
2,4,6-Tribromophenol (S)	%	51	27-110		02/26/19 12:35	
2-Fluorobiphenyl (S)	%	45	27-110		02/26/19 12:35	
2-Fluorophenol (S)	%	29	12-110		02/26/19 12:35	
Nitrobenzene-d5 (S)	%	51	21-110		02/26/19 12:35	
Phenol-d6 (S)	%	20	10-110		02/26/19 12:35	
Terphenyl-d14 (S)	%	53	31-107		02/26/19 12:35	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2506312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	50	25.7	51	44-130	
1,2,4-Trichlorobenzene	ug/L	50	22.5	45	37-130	
1,2-Dichlorobenzene	ug/L	50	23.4	47	34-130	
1,3-Dichlorobenzene	ug/L	50	22.5	45	30-130	
1,4-Dichlorobenzene	ug/L	50	24.8	50	32-130	
1-Methylnaphthalene	ug/L	50	30.1	60	45-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	28.3	57	33-130	
2,3,4,6-Tetrachlorophenol	ug/L	50	45.2	90	10-200	
2,4,5-Trichlorophenol	ug/L	50	29.0	58	17-130	
2,4,6-Trichlorophenol	ug/L	50	29.3	59	10-137	
2,4-Dichlorophenol	ug/L	50	27.3	55	24-130	
2,4-Dimethylphenol	ug/L	50	28.1	56	37-130	
2,4-Dinitrophenol	ug/L	250	177	71	10-160	
2,4-Dinitrotoluene	ug/L	50	36.7	73	61-130	
2,6-Dinitrotoluene	ug/L	50	36.2	72	64-130	
2-Chloronaphthalene	ug/L	50	30.5	61	54-130	
2-Chlorophenol	ug/L	50	26.3	53	24-130	
2-Methylnaphthalene	ug/L	50	29.3	59	47-130	
2-Methylphenol(o-Cresol)	ug/L	50	23.9	48	30-130	
2-Nitroaniline	ug/L	100	64.7	65	52-130	
2-Nitrophenol	ug/L	50	27.1	54	15-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	22.8	46	10-168	
3,3'-Dichlorobenzidine	ug/L	100	64.3	64	10-143	
3-Nitroaniline	ug/L	100	69.8	70	57-130	
4,6-Dinitro-2-methylphenol	ug/L	100	65.9	66	10-166	
4-Bromophenylphenyl ether	ug/L	50	29.2	58	55-130	
4-Chloro-3-methylphenol	ug/L	100	63.8	64	37-130	
4-Chloroaniline	ug/L	100	58.1	58	46-130	
4-Chlorophenylphenyl ether	ug/L	50	31.9	64	55-130	
4-Nitroaniline	ug/L	100	74.6	75	58-130	
4-Nitrophenol	ug/L	250	99.6	40	10-130	
Acenaphthene	ug/L	50	32.4	65	54-130	
Acenaphthylene	ug/L	50	33.9	68	54-130	
Acetophenone	ug/L	50	29.3	59	41-130	
Aniline	ug/L	50	24.2	48	30-130	
Anthracene	ug/L	50	33.5	67	60-130	
Atrazine	ug/L	50	<20.0	31	50-158	L2
Benzaldehyde	ug/L	50	32.3	65	10-130	
Benzo(a)anthracene	ug/L	50	35.6	71	60-130	
Benzo(a)pyrene	ug/L	50	36.1	72	56-130	
Benzo(b)fluoranthene	ug/L	50	39.4	79	59-130	
Benzo(g,h,i)perylene	ug/L	50	35.1	70	58-130	
Benzo(k)fluoranthene	ug/L	50	36.2	72	56-130	
Benzoic Acid	ug/L	250	90.8	36	10-130	
Benzyl alcohol	ug/L	100	53.0	53	34-130	
Biphenyl (Diphenyl)	ug/L	50	26.6	53	49-130	
bis(2-Chloroethoxy)methane	ug/L	50	28.4	57	46-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2506312

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethyl) ether	ug/L	50	27.4	55	41-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	33.7	67	54-130	
Butylbenzylphthalate	ug/L	50	34.9	70	52-130	
Caprolactam	ug/L	50	12.0	24	10-130	
Carbazole	ug/L	50	33.0	66	59-130	
Chrysene	ug/L	50	34.4	69	60-130	
Di-n-butylphthalate	ug/L	50	33.1	66	57-130	
Di-n-octylphthalate	ug/L	50	38.2	76	52-130	
Dibenz(a,h)anthracene	ug/L	50	35.7	71	55-130	
Dibenzofuran	ug/L	50	31.2	62	57-130	
Diethylphthalate	ug/L	50	35.0	70	53-130	
Dimethylphthalate	ug/L	50	34.2	68	54-130	
Fluoranthene	ug/L	50	36.9	74	58-130	
Fluorene	ug/L	50	34.6	69	58-130	
Hexachloro-1,3-butadiene	ug/L	50	19.7	39	27-130	
Hexachlorobenzene	ug/L	50	29.8	60	55-130	
Hexachlorocyclopentadiene	ug/L	50	16.2	32	22-130	
Hexachloroethane	ug/L	50	20.6	41	25-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	36.5	73	58-130	
Isophorone	ug/L	50	26.4	53	39-130	
N-Nitroso-di-n-propylamine	ug/L	50	31.3	63	47-130	
N-Nitrosodimethylamine	ug/L	50	18.9	38	23-130	
N-Nitrosodiphenylamine	ug/L	50	28.9	58	56-130	
Naphthalene	ug/L	50	28.4	57	41-130	
Nitrobenzene	ug/L	50	27.7	55	42-130	
Pentachlorophenol	ug/L	100	59.4	59	10-137	
Phenanthrene	ug/L	50	33.0	66	59-130	
Phenol	ug/L	50	15.0	30	10-130	
Pyrene	ug/L	50	33.6	67	59-130	
2,4,6-Tribromophenol (S)	%			66	27-110	
2-Fluorobiphenyl (S)	%			52	27-110	
2-Fluorophenol (S)	%			36	12-110	
Nitrobenzene-d5 (S)	%			56	21-110	
Phenol-d6 (S)	%			26	10-110	
Terphenyl-d14 (S)	%			61	31-107	

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<9.8	49	25.1	51	26-130	
1,2,4-Trichlorobenzene	ug/L	<9.8	49	20.5	42	18-130	
1,2-Dichlorobenzene	ug/L	<9.8	49	21.0	43	17-130	
1,3-Dichlorobenzene	ug/L	<9.8	49	19.9	41	16-130	
1,4-Dichlorobenzene	ug/L	<9.8	49	22.3	42	17-130	
1-Methylnaphthalene	ug/L	<9.8	49	27.9	57	38-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/L	<9.8	49	24.6	50	10-130	
2,3,4,6-Tetrachlorophenol	ug/L	<9.8	49	36.7	75	10-200	
2,4,5-Trichlorophenol	ug/L	<9.8	49	27.1	55	23-133	
2,4,6-Trichlorophenol	ug/L	<9.8	49	27.7	56	10-146	
2,4-Dichlorophenol	ug/L	<9.8	49	25.5	52	11-136	
2,4-Dimethylphenol	ug/L	<9.8	49	26.1	53	20-130	
2,4-Dinitrophenol	ug/L	<49.0	245	149	61	10-159	
2,4-Dinitrotoluene	ug/L	<9.8	49	34.8	71	66-130	
2,6-Dinitrotoluene	ug/L	<9.8	49	33.9	69	65-130	
2-Chloronaphthalene	ug/L	<9.8	49	28.8	59	40-132	
2-Chlorophenol	ug/L	<9.8	49	22.7	46	10-130	
2-Methylnaphthalene	ug/L	<9.8	49	26.7	55	47-130	
2-Methylphenol(o-Cresol)	ug/L	<9.8	49	21.6	44	10-130	
2-Nitroaniline	ug/L	<49.0	98	61.2	62	49-130	
2-Nitrophenol	ug/L	<9.8	49	24.2	49	10-145	
3&4-Methylphenol(m&p Cresol)	ug/L	<9.8	49	20.7	42	10-197	
3,3'-Dichlorobenzidine	ug/L	<19.6	98	58.5	60	10-130	
3-Nitroaniline	ug/L	<49.0	98	66.0	67	58-130	
4,6-Dinitro-2-methylphenol	ug/L	<19.6	98	63.5	65	10-174	
4-Bromophenylphenyl ether	ug/L	<9.8	49	28.0	57	52-130	
4-Chloro-3-methylphenol	ug/L	<19.6	98	61.1	62	38-130	
4-Chloroaniline	ug/L	<19.6	98	54.2	55	31-130	
4-Chlorophenylphenyl ether	ug/L	<9.8	49	30.5	62	19-130	
4-Nitroaniline	ug/L	<19.6	98	70.7	72	59-130	
4-Nitrophenol	ug/L	<49.0	245	97.6	40	10-130	
Acenaphthene	ug/L	<9.8	49	30.7	63	50-130	
Acenaphthylene	ug/L	<9.8	49	32.3	66	50-130	
Acetophenone	ug/L	<9.8	49	26.6	54	26-130	
Aniline	ug/L	<9.8	49	21.1	43	14-130	
Anthracene	ug/L	<9.8	49	32.0	65	61-130	
Atrazine	ug/L	<19.6	49	<19.6	39	46-150	M0
Benzaldehyde	ug/L	<19.6	49	23.7	48	10-130	
Benzo(a)anthracene	ug/L	<9.8	49	33.8	69	60-130	
Benzo(a)pyrene	ug/L	<9.8	49	35.4	72	58-130	
Benzo(b)fluoranthene	ug/L	<9.8	49	38.2	78	53-139	
Benzo(g,h,i)perylene	ug/L	<9.8	49	33.9	69	58-130	
Benzo(k)fluoranthene	ug/L	<9.8	49	35.7	73	51-130	
Benzoic Acid	ug/L	<49.0	245	<49.0	19	10-130	
Benzyl alcohol	ug/L	<19.6	98	47.5	48	23-130	
Biphenyl (Diphenyl)	ug/L	<9.8	49	25.4	52	44-130	
bis(2-Chloroethoxy)methane	ug/L	<9.8	49	25.4	52	29-130	
bis(2-Chloroethyl) ether	ug/L	<9.8	49	23.6	48	21-130	
bis(2-Ethylhexyl)phthalate	ug/L	<5.9	49	31.7	65	46-140	
Butylbenzylphthalate	ug/L	<9.8	49	33.1	68	45-147	
Caprolactam	ug/L	<9.8	49	<9.8	19	10-130	
Carbazole	ug/L	<9.8	49	31.7	65	63-130	
Chrysene	ug/L	<9.8	49	32.6	67	60-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2506313

Parameter	Units	92418293001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Di-n-butylphthalate	ug/L	<9.8	49	32.0	65	56-130	
Di-n-octylphthalate	ug/L	<9.8	49	36.2	74	38-155	
Dibenz(a,h)anthracene	ug/L	<9.8	49	34.0	69	54-130	
Dibenzofuran	ug/L	<9.8	49	29.5	60	56-130	
Diethylphthalate	ug/L	<9.8	49	33.2	68	54-130	
Dimethylphthalate	ug/L	<9.8	49	32.1	66	53-130	
Fluoranthene	ug/L	<9.8	49	35.6	73	61-130	
Fluorene	ug/L	<9.8	49	33.2	68	56-130	
Hexachloro-1,3-butadiene	ug/L	<9.8	49	18.4	37	10-130	
Hexachlorobenzene	ug/L	<9.8	49	28.8	59	54-130	
Hexachlorocyclopentadiene	ug/L	<9.8	49	15.9	33	10-137	
Hexachloroethane	ug/L	<9.8	49	18.7	38	13-130	
Indeno(1,2,3-cd)pyrene	ug/L	<9.8	49	35.5	72	58-130	
Isophorone	ug/L	<9.8	49	24.8	51	25-130	
N-Nitroso-di-n-propylamine	ug/L	<9.8	49	28.7	58	21-132	
N-Nitrosodimethylamine	ug/L	<9.8	49	16.9	35	10-130	
N-Nitrosodiphenylamine	ug/L	<9.8	49	27.8	57	53-130	
Naphthalene	ug/L	<9.8	49	25.6	52	26-130	
Nitrobenzene	ug/L	<9.8	49	24.6	50	27-130	
Pentachlorophenol	ug/L	<24.5	98	56.8	58	10-130	
Phenanthrene	ug/L	<9.8	49	31.7	65	57-130	
Phenol	ug/L	<9.8	49	13.7	28	10-130	
Pyrene	ug/L	<9.8	49	31.9	65	54-130	
2,4,6-Tribromophenol (S)	%				65	27-110	
2-Fluorobiphenyl (S)	%				51	27-110	
2-Fluorophenol (S)	%				31	12-110	
Nitrobenzene-d5 (S)	%				51	21-110	
Phenol-d6 (S)	%				25	10-110	
Terphenyl-d14 (S)	%				57	31-107	

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<9.8	<9.9		30	
1,2,4-Trichlorobenzene	ug/L	<9.8	<9.9		30	
1,2-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1,3-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1,4-Dichlorobenzene	ug/L	<9.8	<9.9		30	
1-Methylnaphthalene	ug/L	<9.8	<9.9		30	
2,2'-Oxybis(1-chloropropane)	ug/L	<9.8	<9.9		30	
2,3,4,6-Tetrachlorophenol	ug/L	<9.8	<9.9		30	
2,4,5-Trichlorophenol	ug/L	<9.8	<9.9		30	
2,4,6-Trichlorophenol	ug/L	<9.8	<9.9		30	
2,4-Dichlorophenol	ug/L	<9.8	<9.9		30	
2,4-Dimethylphenol	ug/L	<9.8	<9.9		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
2,4-Dinitrophenol	ug/L	<49.0	<49.5		30	
2,4-Dinitrotoluene	ug/L	<9.8	<9.9		30	
2,6-Dinitrotoluene	ug/L	<9.8	<9.9		30	
2-Chloronaphthalene	ug/L	<9.8	<9.9		30	
2-Chlorophenol	ug/L	<9.8	<9.9		30	
2-Methylnaphthalene	ug/L	<9.8	<9.9		30	
2-Methylphenol(o-Cresol)	ug/L	<9.8	<9.9		30	
2-Nitroaniline	ug/L	<49.0	<49.5		30	
2-Nitrophenol	ug/L	<9.8	<9.9		30	
3&4-Methylphenol(m&p Cresol)	ug/L	<9.8	<9.9		30	
3,3'-Dichlorobenzidine	ug/L	<19.6	<19.8		30	
3-Nitroaniline	ug/L	<49.0	<49.5		30	
4,6-Dinitro-2-methylphenol	ug/L	<19.6	<19.8		30	
4-Bromophenylphenyl ether	ug/L	<9.8	<9.9		30	
4-Chloro-3-methylphenol	ug/L	<19.6	<19.8		30	
4-Chloroaniline	ug/L	<19.6	<19.8		30	
4-Chlorophenylphenyl ether	ug/L	<9.8	<9.9		30	
4-Nitroaniline	ug/L	<19.6	<19.8		30	
4-Nitrophenol	ug/L	<49.0	<49.5		30	
Acenaphthene	ug/L	<9.8	<9.9		30	
Acenaphthylene	ug/L	<9.8	<9.9		30	
Acetophenone	ug/L	<9.8	<9.9		30	
Aniline	ug/L	<9.8	<9.9		30	
Anthracene	ug/L	<9.8	<9.9		30	
Atrazine	ug/L	<19.6	<19.8		30	
Benzaldehyde	ug/L	<19.6	<19.8		30	
Benzo(a)anthracene	ug/L	<9.8	<9.9		30	
Benzo(a)pyrene	ug/L	<9.8	<9.9		30	
Benzo(b)fluoranthene	ug/L	<9.8	<9.9		30	
Benzo(g,h,i)perylene	ug/L	<9.8	<9.9		30	
Benzo(k)fluoranthene	ug/L	<9.8	<9.9		30	
Benzoic Acid	ug/L	<49.0	<49.5		0	
Benzyl alcohol	ug/L	<19.6	<19.8		30	
Biphenyl (Diphenyl)	ug/L	<9.8	<9.9		30	
bis(2-Chloroethoxy)methane	ug/L	<9.8	<9.9		30	
bis(2-Chloroethyl) ether	ug/L	<9.8	<9.9		30	
bis(2-Ethylhexyl)phthalate	ug/L	<5.9	<5.9		30	
Butylbenzylphthalate	ug/L	<9.8	<9.9		30	
Caprolactam	ug/L	<9.8	<9.9		30	
Carbazole	ug/L	<9.8	<9.9		30	
Chrysene	ug/L	<9.8	<9.9		30	
Di-n-butylphthalate	ug/L	<9.8	<9.9		30	
Di-n-octylphthalate	ug/L	<9.8	<9.9		30	
Dibenz(a,h)anthracene	ug/L	<9.8	<9.9		30	
Dibenzofuran	ug/L	<9.8	<9.9		30	
Diethylphthalate	ug/L	<9.8	<9.9		30	
Dimethylphthalate	ug/L	<9.8	<9.9		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2506314

Parameter	Units	92418293003 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoranthene	ug/L	<9.8	<9.9		30	
Fluorene	ug/L	<9.8	<9.9		30	
Hexachloro-1,3-butadiene	ug/L	<9.8	<9.9		30	
Hexachlorobenzene	ug/L	<9.8	<9.9		30	
Hexachlorocyclopentadiene	ug/L	<9.8	<9.9		30	
Hexachloroethane	ug/L	<9.8	<9.9		30	
Indeno(1,2,3-cd)pyrene	ug/L	<9.8	<9.9		30	
Isophorone	ug/L	<9.8	<9.9		30	
N-Nitroso-di-n-propylamine	ug/L	<9.8	<9.9		30	
N-Nitrosodimethylamine	ug/L	<9.8	<9.9		30	
N-Nitrosodiphenylamine	ug/L	<9.8	<9.9		30	
Naphthalene	ug/L	<9.8	<9.9		30	
Nitrobenzene	ug/L	<9.8	<9.9		30	
Pentachlorophenol	ug/L	<24.5	<24.8		30	
Phenanthrene	ug/L	<9.8	<9.9		30	
Phenol	ug/L	<9.8	<9.9		30	
Pyrene	ug/L	<9.8	<9.9		30	
2,4,6-Tribromophenol (S)	%	76	71	6		
2-Fluorobiphenyl (S)	%	62	55	12		
2-Fluorophenol (S)	%	37	33	10		
Nitrobenzene-d5 (S)	%	66	59	10		
Phenol-d6 (S)	%	27	24	11		
Terphenyl-d14 (S)	%	76	66	13		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460314 Analysis Method: EPA 8270D
QC Batch Method: EPA 3510C Analysis Description: 8270 Water MSSV
Associated Lab Samples: 92418845009, 92418845011, 92418845013, 92418845014, 92418845015

METHOD BLANK: 2507698 Matrix: Water
Associated Lab Samples: 92418845009, 92418845011, 92418845013, 92418845014, 92418845015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	10.0	1.3	02/27/19 11:32	
1,2,4-Trichlorobenzene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
1,2-Dichlorobenzene	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
1,3-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
1,4-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
1-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	10.0	1.8	02/27/19 11:32	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	10.0	2.9	02/27/19 11:32	
2,4,5-Trichlorophenol	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
2,4,6-Trichlorophenol	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
2,4-Dichlorophenol	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
2,4-Dimethylphenol	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
2,4-Dinitrophenol	ug/L	<50.0	50.0	5.1	02/27/19 11:32	
2,4-Dinitrotoluene	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
2,6-Dinitrotoluene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
2-Chloronaphthalene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
2-Chlorophenol	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
2-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
2-Nitroaniline	ug/L	<50.0	50.0	2.3	02/27/19 11:32	
2-Nitrophenol	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
3,3'-Dichlorobenzidine	ug/L	<20.0	20.0	3.9	02/27/19 11:32	
3-Nitroaniline	ug/L	<50.0	50.0	2.7	02/27/19 11:32	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	2.2	02/27/19 11:32	
4-Bromophenylphenyl ether	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
4-Chloro-3-methylphenol	ug/L	<20.0	20.0	2.8	02/27/19 11:32	
4-Chloroaniline	ug/L	<20.0	20.0	2.8	02/27/19 11:32	
4-Chlorophenylphenyl ether	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
4-Nitroaniline	ug/L	<20.0	20.0	3.4	02/27/19 11:32	
4-Nitrophenol	ug/L	<50.0	50.0	4.3	02/27/19 11:32	
Acenaphthene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Acenaphthylene	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
Acetophenone	ug/L	<10.0	10.0	1.9	02/27/19 11:32	
Aniline	ug/L	<10.0	10.0	1.2	02/27/19 11:32	
Anthracene	ug/L	<10.0	10.0	1.7	02/27/19 11:32	
Atrazine	ug/L	<20.0	20.0	2.6	02/27/19 11:32	
Benzaldehyde	ug/L	<20.0	20.0	1.3	02/27/19 11:32	
Benzo(a)anthracene	ug/L	<10.0	10.0	2.1	02/27/19 11:32	
Benzo(a)pyrene	ug/L	<10.0	10.0	2.2	02/27/19 11:32	
Benzo(b)fluoranthene	ug/L	<10.0	10.0	2.2	02/27/19 11:32	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

METHOD BLANK: 2507698 Matrix: Water
Associated Lab Samples: 92418845009, 92418845011, 92418845013, 92418845014, 92418845015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(g,h,i)perylene	ug/L	<10.0	10.0	2.1	02/27/19 11:32	
Benzo(k)fluoranthene	ug/L	<10.0	10.0	2.0	02/27/19 11:32	
Benzoic Acid	ug/L	<50.0	50.0	5.0	02/27/19 11:32	
Benzyl alcohol	ug/L	<20.0	20.0	3.1	02/27/19 11:32	
Biphenyl (Diphenyl)	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
bis(2-Chloroethoxy)methane	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
bis(2-Chloroethyl) ether	ug/L	<10.0	10.0	1.7	02/27/19 11:32	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	6.0	2.3	02/27/19 11:32	
Butylbenzylphthalate	ug/L	<10.0	10.0	2.5	02/27/19 11:32	
Caprolactam	ug/L	<10.0	10.0	0.96	02/27/19 11:32	
Carbazole	ug/L	<10.0	10.0	1.9	02/27/19 11:32	
Chrysene	ug/L	<10.0	10.0	2.1	02/27/19 11:32	
Di-n-butylphthalate	ug/L	<10.0	10.0	2.0	02/27/19 11:32	
Di-n-octylphthalate	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
Dibenz(a,h)anthracene	ug/L	<10.0	10.0	2.0	02/27/19 11:32	
Dibenzofuran	ug/L	<10.0	10.0	1.7	02/27/19 11:32	
Diethylphthalate	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Dimethylphthalate	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
Fluoranthene	ug/L	<10.0	10.0	2.2	02/27/19 11:32	
Fluorene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Hexachloro-1,3-butadiene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Hexachlorobenzene	ug/L	<10.0	10.0	1.7	02/27/19 11:32	
Hexachlorocyclopentadiene	ug/L	<10.0	10.0	1.3	02/27/19 11:32	
Hexachloroethane	ug/L	<10.0	10.0	1.8	02/27/19 11:32	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	10.0	2.0	02/27/19 11:32	
Isophorone	ug/L	<10.0	10.0	1.5	02/27/19 11:32	
N-Nitroso-di-n-propylamine	ug/L	<10.0	10.0	1.7	02/27/19 11:32	
N-Nitrosodimethylamine	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
N-Nitrosodiphenylamine	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
Naphthalene	ug/L	<10.0	10.0	1.4	02/27/19 11:32	
Nitrobenzene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Pentachlorophenol	ug/L	<25.0	25.0	3.5	02/27/19 11:32	
Phenanthrene	ug/L	<10.0	10.0	1.6	02/27/19 11:32	
Phenol	ug/L	<10.0	10.0	1.3	02/27/19 11:32	
Pyrene	ug/L	<10.0	10.0	2.2	02/27/19 11:32	
2,4,6-Tribromophenol (S)	%	84	27-110		02/27/19 11:32	
2-Fluorobiphenyl (S)	%	68	27-110		02/27/19 11:32	
2-Fluorophenol (S)	%	47	12-110		02/27/19 11:32	
Nitrobenzene-d5 (S)	%	81	21-110		02/27/19 11:32	
Phenol-d6 (S)	%	34	10-110		02/27/19 11:32	
Terphenyl-d14 (S)	%	90	31-107		02/27/19 11:32	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2507699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	50	46.3	93	44-130	
1,2,4-Trichlorobenzene	ug/L	50	40.1	80	37-130	
1,2-Dichlorobenzene	ug/L	50	40.0	80	34-130	
1,3-Dichlorobenzene	ug/L	50	38.3	77	30-130	
1,4-Dichlorobenzene	ug/L	50	43.8	88	32-130	
1-Methylnaphthalene	ug/L	50	49.0	98	45-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	46.8	94	33-130	
2,3,4,6-Tetrachlorophenol	ug/L	50	58.3	117	10-200	
2,4,5-Trichlorophenol	ug/L	50	43.2	86	17-130	
2,4,6-Trichlorophenol	ug/L	50	45.6	91	10-137	
2,4-Dichlorophenol	ug/L	50	45.3	91	24-130	
2,4-Dimethylphenol	ug/L	50	46.9	94	37-130	
2,4-Dinitrophenol	ug/L	250	247	99	10-160	
2,4-Dinitrotoluene	ug/L	50	48.9	98	61-130	
2,6-Dinitrotoluene	ug/L	50	50.8	102	64-130	
2-Chloronaphthalene	ug/L	50	52.9	106	54-130	
2-Chlorophenol	ug/L	50	44.5	89	24-130	
2-Methylnaphthalene	ug/L	50	48.1	96	47-130	
2-Methylphenol(o-Cresol)	ug/L	50	40.6	81	30-130	
2-Nitroaniline	ug/L	100	91.9	92	52-130	
2-Nitrophenol	ug/L	50	45.6	91	15-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	36.5	73	10-168	
3,3'-Dichlorobenzidine	ug/L	100	103	103	10-143	
3-Nitroaniline	ug/L	100	94.2	94	57-130	
4,6-Dinitro-2-methylphenol	ug/L	100	98.6	99	10-166	
4-Bromophenylphenyl ether	ug/L	50	45.5	91	55-130	
4-Chloro-3-methylphenol	ug/L	100	93.5	93	37-130	
4-Chloroaniline	ug/L	100	91.2	91	46-130	
4-Chlorophenylphenyl ether	ug/L	50	47.5	95	55-130	
4-Nitroaniline	ug/L	100	96.8	97	58-130	
4-Nitrophenol	ug/L	250	136	55	10-130	
Acenaphthene	ug/L	50	50.2	100	54-130	
Acenaphthylene	ug/L	50	52.1	104	54-130	
Acetophenone	ug/L	50	46.9	94	41-130	
Aniline	ug/L	50	38.3	77	30-130	
Anthracene	ug/L	50	47.9	96	60-130	
Atrazine	ug/L	50	28.2	56	50-158	
Benzaldehyde	ug/L	50	37.7	75	10-130	
Benzo(a)anthracene	ug/L	50	56.2	112	60-130	
Benzo(a)pyrene	ug/L	50	53.0	106	56-130	
Benzo(b)fluoranthene	ug/L	50	57.1	114	59-130	
Benzo(g,h,i)perylene	ug/L	50	55.5	111	58-130	
Benzo(k)fluoranthene	ug/L	50	52.8	106	56-130	
Benzoic Acid	ug/L	250	132	53	10-130	
Benzyl alcohol	ug/L	100	84.7	85	34-130	
Biphenyl (Diphenyl)	ug/L	50	44.9	90	49-130	
bis(2-Chloroethoxy)methane	ug/L	50	46.2	92	46-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2507699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethyl) ether	ug/L	50	45.1	90	41-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	56.4	113	54-130	
Butylbenzylphthalate	ug/L	50	58.4	117	52-130	
Caprolactam	ug/L	50	11.9	24	10-130	
Carbazole	ug/L	50	46.3	93	59-130	
Chrysene	ug/L	50	54.8	110	60-130	
Di-n-butylphthalate	ug/L	50	49.4	99	57-130	
Di-n-octylphthalate	ug/L	50	61.6	123	52-130	
Dibenz(a,h)anthracene	ug/L	50	54.2	108	55-130	
Dibenzofuran	ug/L	50	46.2	92	57-130	
Diethylphthalate	ug/L	50	49.0	98	53-130	
Dimethylphthalate	ug/L	50	48.6	97	54-130	
Fluoranthene	ug/L	50	49.9	100	58-130	
Fluorene	ug/L	50	50.8	102	58-130	
Hexachloro-1,3-butadiene	ug/L	50	38.2	76	27-130	
Hexachlorobenzene	ug/L	50	45.5	91	55-130	
Hexachlorocyclopentadiene	ug/L	50	36.7	73	22-130	
Hexachloroethane	ug/L	50	37.4	75	25-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	56.6	113	58-130	
Isophorone	ug/L	50	43.6	87	39-130	
N-Nitroso-di-n-propylamine	ug/L	50	48.5	97	47-130	
N-Nitrosodimethylamine	ug/L	50	31.9	64	23-130	
N-Nitrosodiphenylamine	ug/L	50	43.9	88	56-130	
Naphthalene	ug/L	50	47.5	95	41-130	
Nitrobenzene	ug/L	50	45.1	90	42-130	
Pentachlorophenol	ug/L	100	86.0	86	10-137	
Phenanthrene	ug/L	50	47.5	95	59-130	
Phenol	ug/L	50	25.0	50	10-130	
Pyrene	ug/L	50	55.3	111	59-130	
2,4,6-Tribromophenol (S)	%			98	27-110	
2-Fluorobiphenyl (S)	%			89	27-110	
2-Fluorophenol (S)	%			64	12-110	
Nitrobenzene-d5 (S)	%			93	21-110	
Phenol-d6 (S)	%			44	10-110	
Terphenyl-d14 (S)	%			105	31-107	

MATRIX SPIKE SAMPLE: 2507700

Parameter	Units	92418845013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	50	27.8	56	26-130	
1,2,4-Trichlorobenzene	ug/L	<10.0	50	18.6	37	18-130	
1,2-Dichlorobenzene	ug/L	<10.0	50	16.1	32	17-130	
1,3-Dichlorobenzene	ug/L	<10.0	50	14.8	30	16-130	
1,4-Dichlorobenzene	ug/L	<10.0	50	17.3	28	17-130	
1-Methylnaphthalene	ug/L	<10.0	50	31.4	63	38-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2507700

Parameter	Units	92418845013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	50	24.1	48	10-130	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	50	42.0	84	10-200	
2,4,5-Trichlorophenol	ug/L	<10.0	50	32.5	65	23-133	
2,4,6-Trichlorophenol	ug/L	<10.0	50	33.3	67	10-146	
2,4-Dichlorophenol	ug/L	<10.0	50	30.2	60	11-136	
2,4-Dimethylphenol	ug/L	<10.0	50	28.0	56	20-130	
2,4-Dinitrophenol	ug/L	<50.0	250	181	72	10-159	
2,4-Dinitrotoluene	ug/L	<10.0	50	38.7	77	66-130	
2,6-Dinitrotoluene	ug/L	<10.0	50	39.7	79	65-130	
2-Chloronaphthalene	ug/L	<10.0	50	34.4	69	40-132	
2-Chlorophenol	ug/L	<10.0	50	22.3	45	10-130	
2-Methylnaphthalene	ug/L	<10.0	50	30.2	60	47-130	
2-Methylphenol(o-Cresol)	ug/L	<10.0	50	22.5	45	10-130	
2-Nitroaniline	ug/L	<50.0	100	70.3	70	49-130	
2-Nitrophenol	ug/L	<10.0	50	27.2	54	10-145	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	50	23.1	46	10-197	
3,3'-Dichlorobenzidine	ug/L	<20.0	100	45.0	45	10-130	
3-Nitroaniline	ug/L	<50.0	100	69.2	69	58-130	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	100	77.3	77	10-174	
4-Bromophenylphenyl ether	ug/L	<10.0	50	35.0	70	52-130	
4-Chloro-3-methylphenol	ug/L	<20.0	100	70.1	70	38-130	
4-Chloroaniline	ug/L	<20.0	100	52.3	52	31-130	
4-Chlorophenylphenyl ether	ug/L	<10.0	50	36.3	73	19-130	
4-Nitroaniline	ug/L	<20.0	100	71.5	71	59-130	
4-Nitrophenol	ug/L	<50.0	250	113	45	10-130	
Acenaphthene	ug/L	<10.0	50	37.2	74	50-130	
Acenaphthylene	ug/L	<10.0	50	38.6	77	50-130	
Acetophenone	ug/L	<10.0	50	28.2	56	26-130	
Aniline	ug/L	<10.0	50	11.4	23	14-130	
Anthracene	ug/L	<10.0	50	37.8	76	61-130	
Atrazine	ug/L	<20.0	50	23.9	48	46-150	
Benzaldehyde	ug/L	<20.0	50	29.7	59	10-130	
Benzo(a)anthracene	ug/L	<10.0	50	43.2	86	60-130	
Benzo(a)pyrene	ug/L	<10.0	50	41.7	83	58-130	
Benzo(b)fluoranthene	ug/L	<10.0	50	45.6	91	53-139	
Benzo(g,h,i)perylene	ug/L	<10.0	50	42.4	85	58-130	
Benzo(k)fluoranthene	ug/L	<10.0	50	42.5	85	51-130	
Benzoic Acid	ug/L	<50.0	250	64.7	26	10-130	
Benzyl alcohol	ug/L	<20.0	100	52.9	53	23-130	
Biphenyl (Diphenyl)	ug/L	<10.0	50	31.0	62	44-130	
bis(2-Chloroethoxy)methane	ug/L	<10.0	50	30.0	60	29-130	
bis(2-Chloroethyl) ether	ug/L	<10.0	50	23.1	46	21-130	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	50	44.5	89	46-140	
Butylbenzylphthalate	ug/L	<10.0	50	45.0	90	45-147	
Caprolactam	ug/L	<10.0	50	<10.0	9	10-130	M1
Carbazole	ug/L	<10.0	50	35.3	71	63-130	
Chrysene	ug/L	<10.0	50	42.9	86	60-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2507700

Parameter	Units	92418845013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Di-n-butylphthalate	ug/L	<10.0	50	38.6	77	56-130	
Di-n-octylphthalate	ug/L	<10.0	50	48.0	96	38-155	
Dibenz(a,h)anthracene	ug/L	<10.0	50	42.8	86	54-130	
Dibenzofuran	ug/L	<10.0	50	35.1	70	56-130	
Diethylphthalate	ug/L	<10.0	50	39.3	79	54-130	
Dimethylphthalate	ug/L	<10.0	50	38.0	76	53-130	
Fluoranthene	ug/L	<10.0	50	39.5	79	61-130	
Fluorene	ug/L	<10.0	50	39.1	78	56-130	
Hexachloro-1,3-butadiene	ug/L	<10.0	50	15.2	30	10-130	
Hexachlorobenzene	ug/L	<10.0	50	34.9	70	54-130	
Hexachlorocyclopentadiene	ug/L	<10.0	50	20.1	40	10-137	
Hexachloroethane	ug/L	<10.0	50	13.4	27	13-130	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	50	43.0	86	58-130	
Isophorone	ug/L	<10.0	50	29.8	60	25-130	
N-Nitroso-di-n-propylamine	ug/L	<10.0	50	31.8	64	21-132	
N-Nitrosodimethylamine	ug/L	<10.0	50	15.5	31	10-130	
N-Nitrosodiphenylamine	ug/L	<10.0	50	29.2	58	53-130	
Naphthalene	ug/L	<10.0	50	25.9	52	26-130	
Nitrobenzene	ug/L	<10.0	50	27.2	54	27-130	
Pentachlorophenol	ug/L	<25.0	100	66.7	67	10-130	
Phenanthrene	ug/L	<10.0	50	37.6	75	57-130	
Phenol	ug/L	<10.0	50	14.1	28	10-130	
Pyrene	ug/L	<10.0	50	43.4	87	54-130	
2,4,6-Tribromophenol (S)	%				78	27-110	
2-Fluorobiphenyl (S)	%				63	27-110	
2-Fluorophenol (S)	%				31	12-110	
Nitrobenzene-d5 (S)	%				55	21-110	
Phenol-d6 (S)	%				27	10-110	
Terphenyl-d14 (S)	%				79	31-107	

SAMPLE DUPLICATE: 2507701

Parameter	Units	92418845015 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	<10.0		30	
1,2,4-Trichlorobenzene	ug/L	<10.0	<10.0		30	
1,2-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1,3-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1,4-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1-Methylnaphthalene	ug/L	<10.0	<10.0		30	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	<10.0		30	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	<10.0		30	
2,4,5-Trichlorophenol	ug/L	<10.0	<10.0		30	
2,4,6-Trichlorophenol	ug/L	<10.0	<10.0		30	
2,4-Dichlorophenol	ug/L	<10.0	<10.0		30	
2,4-Dimethylphenol	ug/L	<10.0	<10.0		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2507701

Parameter	Units	92418845015 Result	Dup Result	RPD	Max RPD	Qualifiers
2,4-Dinitrophenol	ug/L	<50.0	<50.0		30	
2,4-Dinitrotoluene	ug/L	<10.0	<10.0		30	
2,6-Dinitrotoluene	ug/L	<10.0	<10.0		30	
2-Chloronaphthalene	ug/L	<10.0	<10.0		30	
2-Chlorophenol	ug/L	<10.0	<10.0		30	
2-Methylnaphthalene	ug/L	<10.0	<10.0		30	
2-Methylphenol(o-Cresol)	ug/L	<10.0	<10.0		30	
2-Nitroaniline	ug/L	<50.0	<50.0		30	
2-Nitrophenol	ug/L	<10.0	<10.0		30	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	<10.0		30	
3,3'-Dichlorobenzidine	ug/L	<20.0	<20.0		30	
3-Nitroaniline	ug/L	<50.0	<50.0		30	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	<20.0		30	
4-Bromophenylphenyl ether	ug/L	<10.0	<10.0		30	
4-Chloro-3-methylphenol	ug/L	<20.0	<20.0		30	
4-Chloroaniline	ug/L	<20.0	<20.0		30	
4-Chlorophenylphenyl ether	ug/L	<10.0	<10.0		30	
4-Nitroaniline	ug/L	<20.0	<20.0		30	
4-Nitrophenol	ug/L	<50.0	<50.0		30	
Acenaphthene	ug/L	<10.0	<10.0		30	
Acenaphthylene	ug/L	<10.0	<10.0		30	
Acetophenone	ug/L	<10.0	<10.0		30	
Aniline	ug/L	<10.0	<10.0		30	
Anthracene	ug/L	<10.0	<10.0		30	
Atrazine	ug/L	<20.0	<20.0		30	
Benzaldehyde	ug/L	<20.0	<20.0		30	
Benzo(a)anthracene	ug/L	<10.0	<10.0		30	
Benzo(a)pyrene	ug/L	<10.0	<10.0		30	
Benzo(b)fluoranthene	ug/L	<10.0	<10.0		30	
Benzo(g,h,i)perylene	ug/L	<10.0	<10.0		30	
Benzo(k)fluoranthene	ug/L	<10.0	<10.0		30	
Benzoic Acid	ug/L	<50.0	<50.0		0	
Benzyl alcohol	ug/L	<20.0	<20.0		30	
Biphenyl (Diphenyl)	ug/L	<10.0	<10.0		30	
bis(2-Chloroethoxy)methane	ug/L	<10.0	<10.0		30	
bis(2-Chloroethyl) ether	ug/L	<10.0	<10.0		30	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	<6.0		30	
Butylbenzylphthalate	ug/L	<10.0	<10.0		30	
Caprolactam	ug/L	<10.0	<10.0		30	
Carbazole	ug/L	<10.0	<10.0		30	
Chrysene	ug/L	<10.0	<10.0		30	
Di-n-butylphthalate	ug/L	<10.0	<10.0		30	
Di-n-octylphthalate	ug/L	<10.0	<10.0		30	
Dibenz(a,h)anthracene	ug/L	<10.0	<10.0		30	
Dibenzofuran	ug/L	<10.0	<10.0		30	
Diethylphthalate	ug/L	<10.0	<10.0		30	
Dimethylphthalate	ug/L	<10.0	<10.0		30	

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REPORT OF LABORATORY ANALYSIS

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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2507701

Parameter	Units	92418845015 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoranthene	ug/L	<10.0	<10.0		30	
Fluorene	ug/L	<10.0	<10.0		30	
Hexachloro-1,3-butadiene	ug/L	<10.0	<10.0		30	
Hexachlorobenzene	ug/L	<10.0	<10.0		30	
Hexachlorocyclopentadiene	ug/L	<10.0	<10.0		30	
Hexachloroethane	ug/L	<10.0	<10.0		30	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	<10.0		30	
Isophorone	ug/L	<10.0	<10.0		30	
N-Nitroso-di-n-propylamine	ug/L	<10.0	<10.0		30	
N-Nitrosodimethylamine	ug/L	<10.0	<10.0		30	
N-Nitrosodiphenylamine	ug/L	<10.0	<10.0		30	
Naphthalene	ug/L	<10.0	<10.0		30	
Nitrobenzene	ug/L	<10.0	<10.0		30	
Pentachlorophenol	ug/L	<25.0	<25.0		30	
Phenanthrene	ug/L	<10.0	<10.0		30	
Phenol	ug/L	<10.0	<10.0		30	
Pyrene	ug/L	<10.0	<10.0		30	
2,4,6-Tribromophenol (S)	%	82	77	6		
2-Fluorobiphenyl (S)	%	71	64	10		
2-Fluorophenol (S)	%	46	47	1		
Nitrobenzene-d5 (S)	%	76	72	6		
Phenol-d6 (S)	%	34	40	16		
Terphenyl-d14 (S)	%	64	69	8		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460611 Analysis Method: EPA 8270D
QC Batch Method: EPA 3510C Analysis Description: 8270 Water MSSV
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845012, 92418845016

METHOD BLANK: 2509036 Matrix: Water
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845012, 92418845016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	10.0	1.3	02/28/19 13:50	
1,2,4-Trichlorobenzene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
1,2-Dichlorobenzene	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
1,3-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
1,4-Dichlorobenzene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
1-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	10.0	1.8	02/28/19 13:50	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	10.0	2.9	02/28/19 13:50	
2,4,5-Trichlorophenol	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
2,4,6-Trichlorophenol	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
2,4-Dichlorophenol	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
2,4-Dimethylphenol	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
2,4-Dinitrophenol	ug/L	<50.0	50.0	5.1	02/28/19 13:50	
2,4-Dinitrotoluene	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
2,6-Dinitrotoluene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
2-Chloronaphthalene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
2-Chlorophenol	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
2-Methylnaphthalene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
2-Methylphenol(o-Cresol)	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
2-Nitroaniline	ug/L	<50.0	50.0	2.3	02/28/19 13:50	
2-Nitrophenol	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
3,3'-Dichlorobenzidine	ug/L	<20.0	20.0	3.9	02/28/19 13:50	
3-Nitroaniline	ug/L	<50.0	50.0	2.7	02/28/19 13:50	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	20.0	2.2	02/28/19 13:50	
4-Bromophenylphenyl ether	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
4-Chloro-3-methylphenol	ug/L	<20.0	20.0	2.8	02/28/19 13:50	
4-Chloroaniline	ug/L	<20.0	20.0	2.8	02/28/19 13:50	
4-Chlorophenylphenyl ether	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
4-Nitroaniline	ug/L	<20.0	20.0	3.4	02/28/19 13:50	
4-Nitrophenol	ug/L	<50.0	50.0	4.3	02/28/19 13:50	
Acenaphthene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Acenaphthylene	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
Acetophenone	ug/L	<10.0	10.0	1.9	02/28/19 13:50	
Aniline	ug/L	<10.0	10.0	1.2	02/28/19 13:50	
Anthracene	ug/L	<10.0	10.0	1.7	02/28/19 13:50	
Atrazine	ug/L	<20.0	20.0	2.6	02/28/19 13:50	
Benzaldehyde	ug/L	<20.0	20.0	1.3	02/28/19 13:50	
Benzo(a)anthracene	ug/L	<10.0	10.0	2.1	02/28/19 13:50	
Benzo(a)pyrene	ug/L	<10.0	10.0	2.2	02/28/19 13:50	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

METHOD BLANK: 2509036 Matrix: Water

Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845012, 92418845016

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Benzo(b)fluoranthene	ug/L	<10.0	10.0	2.2	02/28/19 13:50	
Benzo(g,h,i)perylene	ug/L	<10.0	10.0	2.1	02/28/19 13:50	
Benzo(k)fluoranthene	ug/L	<10.0	10.0	2.0	02/28/19 13:50	
Benzoic Acid	ug/L	<50.0	50.0	5.0	02/28/19 13:50	
Benzyl alcohol	ug/L	<20.0	20.0	3.1	02/28/19 13:50	
Biphenyl (Diphenyl)	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
bis(2-Chloroethoxy)methane	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
bis(2-Chloroethyl) ether	ug/L	<10.0	10.0	1.7	02/28/19 13:50	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	6.0	2.3	02/28/19 13:50	
Butylbenzylphthalate	ug/L	<10.0	10.0	2.5	02/28/19 13:50	
Caprolactam	ug/L	<10.0	10.0	0.96	02/28/19 13:50	
Carbazole	ug/L	<10.0	10.0	1.9	02/28/19 13:50	
Chrysene	ug/L	<10.0	10.0	2.1	02/28/19 13:50	
Di-n-butylphthalate	ug/L	<10.0	10.0	2.0	02/28/19 13:50	
Di-n-octylphthalate	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
Dibenz(a,h)anthracene	ug/L	<10.0	10.0	2.0	02/28/19 13:50	
Dibenzofuran	ug/L	<10.0	10.0	1.7	02/28/19 13:50	
Diethylphthalate	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Dimethylphthalate	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
Fluoranthene	ug/L	<10.0	10.0	2.2	02/28/19 13:50	
Fluorene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Hexachloro-1,3-butadiene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Hexachlorobenzene	ug/L	<10.0	10.0	1.7	02/28/19 13:50	
Hexachlorocyclopentadiene	ug/L	<10.0	10.0	1.3	02/28/19 13:50	
Hexachloroethane	ug/L	<10.0	10.0	1.8	02/28/19 13:50	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	10.0	2.0	02/28/19 13:50	
Isophorone	ug/L	<10.0	10.0	1.5	02/28/19 13:50	
N-Nitroso-di-n-propylamine	ug/L	<10.0	10.0	1.7	02/28/19 13:50	
N-Nitrosodimethylamine	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
N-Nitrosodiphenylamine	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
Naphthalene	ug/L	<10.0	10.0	1.4	02/28/19 13:50	
Nitrobenzene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Pentachlorophenol	ug/L	<25.0	25.0	3.5	02/28/19 13:50	
Phenanthrene	ug/L	<10.0	10.0	1.6	02/28/19 13:50	
Phenol	ug/L	<10.0	10.0	1.3	02/28/19 13:50	
Pyrene	ug/L	<10.0	10.0	2.2	02/28/19 13:50	
2,4,6-Tribromophenol (S)	%	80	27-110		02/28/19 13:50	
2-Fluorobiphenyl (S)	%	70	27-110		02/28/19 13:50	
2-Fluorophenol (S)	%	58	12-110		02/28/19 13:50	
Nitrobenzene-d5 (S)	%	75	21-110		02/28/19 13:50	
Phenol-d6 (S)	%	46	10-110		02/28/19 13:50	
Terphenyl-d14 (S)	%	93	31-107		02/28/19 13:50	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2509037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	50	40.4	81	44-130	
1,2,4-Trichlorobenzene	ug/L	50	32.8	66	37-130	
1,2-Dichlorobenzene	ug/L	50	32.6	65	34-130	
1,3-Dichlorobenzene	ug/L	50	30.7	61	30-130	
1,4-Dichlorobenzene	ug/L	50	34.5	69	32-130	
1-Methylnaphthalene	ug/L	50	42.4	85	45-130	
2,2'-Oxybis(1-chloropropane)	ug/L	50	40.1	80	33-130	
2,3,4,6-Tetrachlorophenol	ug/L	50	48.8	98	10-200	
2,4,5-Trichlorophenol	ug/L	50	41.6	83	17-130	
2,4,6-Trichlorophenol	ug/L	50	43.1	86	10-137	
2,4-Dichlorophenol	ug/L	50	39.1	78	24-130	
2,4-Dimethylphenol	ug/L	50	40.0	80	37-130	
2,4-Dinitrophenol	ug/L	250	232	93	10-160	
2,4-Dinitrotoluene	ug/L	50	48.4	97	61-130	
2,6-Dinitrotoluene	ug/L	50	49.8	100	64-130	
2-Chloronaphthalene	ug/L	50	46.7	93	54-130	
2-Chlorophenol	ug/L	50	36.0	72	24-130	
2-Methylnaphthalene	ug/L	50	41.7	83	47-130	
2-Methylphenol(o-Cresol)	ug/L	50	32.2	64	30-130	
2-Nitroaniline	ug/L	100	88.6	89	52-130	
2-Nitrophenol	ug/L	50	39.5	79	15-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	28.7	57	10-168	
3,3'-Dichlorobenzidine	ug/L	100	96.4	96	10-143	
3-Nitroaniline	ug/L	100	92.5	93	57-130	
4,6-Dinitro-2-methylphenol	ug/L	100	92.5	92	10-166	
4-Bromophenylphenyl ether	ug/L	50	43.8	88	55-130	
4-Chloro-3-methylphenol	ug/L	100	85.1	85	37-130	
4-Chloroaniline	ug/L	100	78.3	78	46-130	
4-Chlorophenylphenyl ether	ug/L	50	46.1	92	55-130	
4-Nitroaniline	ug/L	100	96.2	96	58-130	
4-Nitrophenol	ug/L	250	122	49	10-130	
Acenaphthene	ug/L	50	47.3	95	54-130	
Acenaphthylene	ug/L	50	49.4	99	54-130	
Acetophenone	ug/L	50	40.5	81	41-130	
Aniline	ug/L	50	28.8	58	30-130	
Anthracene	ug/L	50	47.4	95	60-130	
Atrazine	ug/L	50	23.7	47	50-158	L2
Benzaldehyde	ug/L	50	41.0	82	10-130	
Benzo(a)anthracene	ug/L	50	55.6	111	60-130	
Benzo(a)pyrene	ug/L	50	55.1	110	56-130	
Benzo(b)fluoranthene	ug/L	50	59.7	119	59-130	
Benzo(g,h,i)perylene	ug/L	50	55.1	110	58-130	
Benzo(k)fluoranthene	ug/L	50	54.6	109	56-130	
Benzoic Acid	ug/L	250	113	45	10-130	
Benzyl alcohol	ug/L	100	69.6	70	34-130	
Biphenyl (Diphenyl)	ug/L	50	40.5	81	49-130	
bis(2-Chloroethoxy)methane	ug/L	50	41.2	82	46-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

LABORATORY CONTROL SAMPLE: 2509037

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
bis(2-Chloroethyl) ether	ug/L	50	39.0	78	41-130	
bis(2-Ethylhexyl)phthalate	ug/L	50	54.5	109	54-130	
Butylbenzylphthalate	ug/L	50	55.3	111	52-130	
Caprolactam	ug/L	50	10.3	21	10-130	
Carbazole	ug/L	50	45.4	91	59-130	
Chrysene	ug/L	50	54.0	108	60-130	
Di-n-butylphthalate	ug/L	50	47.9	96	57-130	
Di-n-octylphthalate	ug/L	50	61.4	123	52-130	
Dibenz(a,h)anthracene	ug/L	50	56.8	114	55-130	
Dibenzofuran	ug/L	50	44.7	89	57-130	
Diethylphthalate	ug/L	50	48.7	97	53-130	
Dimethylphthalate	ug/L	50	47.5	95	54-130	
Fluoranthene	ug/L	50	49.6	99	58-130	
Fluorene	ug/L	50	49.4	99	58-130	
Hexachloro-1,3-butadiene	ug/L	50	30.3	61	27-130	
Hexachlorobenzene	ug/L	50	43.9	88	55-130	
Hexachlorocyclopentadiene	ug/L	50	31.1	62	22-130	
Hexachloroethane	ug/L	50	28.9	58	25-130	
Indeno(1,2,3-cd)pyrene	ug/L	50	57.4	115	58-130	
Isophorone	ug/L	50	39.3	79	39-130	
N-Nitroso-di-n-propylamine	ug/L	50	41.7	83	47-130	
N-Nitrosodimethylamine	ug/L	50	24.7	49	23-130	
N-Nitrosodiphenylamine	ug/L	50	42.4	85	56-130	
Naphthalene	ug/L	50	41.1	82	41-130	
Nitrobenzene	ug/L	50	39.6	79	42-130	
Pentachlorophenol	ug/L	100	83.7	84	10-137	
Phenanthrene	ug/L	50	46.8	94	59-130	
Phenol	ug/L	50	19.1	38	10-130	
Pyrene	ug/L	50	54.2	108	59-130	
2,4,6-Tribromophenol (S)	%			103	27-110	
2-Fluorobiphenyl (S)	%			85	27-110	
2-Fluorophenol (S)	%			52	12-110	
Nitrobenzene-d5 (S)	%			86	21-110	
Phenol-d6 (S)	%			36	10-110	
Terphenyl-d14 (S)	%			104	31-107	

MATRIX SPIKE SAMPLE: 2509038

Parameter	Units	92418845004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	50	26.2	52	26-130	
1,2,4-Trichlorobenzene	ug/L	<10.0	50	22.7	45	18-130	
1,2-Dichlorobenzene	ug/L	<10.0	50	22.7	45	17-130	
1,3-Dichlorobenzene	ug/L	<10.0	50	21.9	44	16-130	
1,4-Dichlorobenzene	ug/L	<10.0	50	24.1	45	17-130	
1-Methylnaphthalene	ug/L	<10.0	50	27.4	55	38-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2509038

Parameter	Units	92418845004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	50	25.9	52	10-130	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	50	48.3	97	10-200	
2,4,5-Trichlorophenol	ug/L	<10.0	50	30.5	61	23-133	
2,4,6-Trichlorophenol	ug/L	<10.0	50	29.3	59	10-146	
2,4-Dichlorophenol	ug/L	<10.0	50	25.1	50	11-136	
2,4-Dimethylphenol	ug/L	<10.0	50	25.2	50	20-130	
2,4-Dinitrophenol	ug/L	<50.0	250	199	80	10-159	
2,4-Dinitrotoluene	ug/L	<10.0	50	41.7	83	66-130	
2,6-Dinitrotoluene	ug/L	<10.0	50	39.4	79	65-130	
2-Chloronaphthalene	ug/L	<10.0	50	29.6	59	40-132	
2-Chlorophenol	ug/L	<10.0	50	23.6	47	10-130	
2-Methylnaphthalene	ug/L	<10.0	50	26.8	54	47-130	
2-Methylphenol(o-Cresol)	ug/L	<10.0	50	20.5	41	10-130	
2-Nitroaniline	ug/L	<50.0	100	71.2	71	49-130	
2-Nitrophenol	ug/L	<10.0	50	25.6	51	10-145	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	50	17.6	35	10-197	
3,3'-Dichlorobenzidine	ug/L	<20.0	100	84.1	84	10-130	
3-Nitroaniline	ug/L	<50.0	100	78.4	78	58-130	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	100	84.5	84	10-174	
4-Bromophenylphenyl ether	ug/L	<10.0	50	35.9	72	52-130	
4-Chloro-3-methylphenol	ug/L	<20.0	100	61.6	62	38-130	
4-Chloroaniline	ug/L	<20.0	100	50.3	50	31-130	
4-Chlorophenylphenyl ether	ug/L	<10.0	50	33.9	68	19-130	
4-Nitroaniline	ug/L	<20.0	100	84.5	85	59-130	
4-Nitrophenol	ug/L	<50.0	250	115	46	10-130	
Acenaphthene	ug/L	<10.0	50	32.2	64	50-130	
Acenaphthylene	ug/L	<10.0	50	33.3	67	50-130	
Acetophenone	ug/L	<10.0	50	25.3	51	26-130	
Aniline	ug/L	<10.0	50	20.0	40	14-130	
Anthracene	ug/L	<10.0	50	41.5	83	61-130	
Atrazine	ug/L	<20.0	50	22.5	45	46-150	M0
Benzaldehyde	ug/L	<20.0	50	22.9	46	10-130	
Benzo(a)anthracene	ug/L	<10.0	50	51.0	102	60-130	
Benzo(a)pyrene	ug/L	<10.0	50	47.4	95	58-130	
Benzo(b)fluoranthene	ug/L	<10.0	50	50.6	101	53-139	
Benzo(g,h,i)perylene	ug/L	<10.0	50	47.3	95	58-130	
Benzo(k)fluoranthene	ug/L	<10.0	50	46.7	93	51-130	
Benzoic Acid	ug/L	<50.0	250	60.0	24	10-130	
Benzyl alcohol	ug/L	<20.0	100	43.0	43	23-130	
Biphenyl (Diphenyl)	ug/L	<10.0	50	25.7	51	44-130	
bis(2-Chloroethoxy)methane	ug/L	<10.0	50	25.5	51	29-130	
bis(2-Chloroethyl) ether	ug/L	<10.0	50	24.9	50	21-130	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	50	47.9	96	46-140	
Butylbenzylphthalate	ug/L	<10.0	50	50.2	100	45-147	
Caprolactam	ug/L	<10.0	50	<10.0	14	10-130	
Carbazole	ug/L	<10.0	50	39.8	80	63-130	
Chrysene	ug/L	<10.0	50	50.3	101	60-130	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

MATRIX SPIKE SAMPLE: 2509038

Parameter	Units	92418845004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Di-n-butylphthalate	ug/L	<10.0	50	41.7	83	56-130	
Di-n-octylphthalate	ug/L	<10.0	50	54.0	108	38-155	
Dibenz(a,h)anthracene	ug/L	<10.0	50	47.6	95	54-130	
Dibenzofuran	ug/L	<10.0	50	32.0	64	56-130	
Diethylphthalate	ug/L	<10.0	50	41.9	84	54-130	
Dimethylphthalate	ug/L	<10.0	50	39.4	79	53-130	
Fluoranthene	ug/L	<10.0	50	43.4	87	61-130	
Fluorene	ug/L	<10.0	50	36.9	74	56-130	
Hexachloro-1,3-butadiene	ug/L	<10.0	50	21.4	43	10-130	
Hexachlorobenzene	ug/L	<10.0	50	36.0	72	54-130	
Hexachlorocyclopentadiene	ug/L	<10.0	50	21.0	42	10-137	
Hexachloroethane	ug/L	<10.0	50	21.1	42	13-130	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	50	48.4	97	58-130	
Isophorone	ug/L	<10.0	50	24.5	49	25-130	
N-Nitroso-di-n-propylamine	ug/L	<10.0	50	26.3	53	21-132	
N-Nitrosodimethylamine	ug/L	<10.0	50	17.7	35	10-130	
N-Nitrosodiphenylamine	ug/L	<10.0	50	35.9	72	53-130	
Naphthalene	ug/L	<10.0	50	26.8	54	26-130	
Nitrobenzene	ug/L	<10.0	50	25.6	51	27-130	
Pentachlorophenol	ug/L	47.4	100	150	102	10-130	
Phenanthrene	ug/L	<10.0	50	41.2	82	57-130	
Phenol	ug/L	<10.0	50	12.9	26	10-130	
Pyrene	ug/L	<10.0	50	49.7	99	54-130	
2,4,6-Tribromophenol (S)	%				88	27-110	
2-Fluorobiphenyl (S)	%				54	27-110	
2-Fluorophenol (S)	%				34	12-110	
Nitrobenzene-d5 (S)	%				55	21-110	
Phenol-d6 (S)	%				23	10-110	
Terphenyl-d14 (S)	%				79	31-107	

SAMPLE DUPLICATE: 2509039

Parameter	Units	92418845012 Result	Dup Result	RPD	Max RPD	Qualifiers
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0	<10.0		30	
1,2,4-Trichlorobenzene	ug/L	<10.0	<10.0		30	
1,2-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1,3-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1,4-Dichlorobenzene	ug/L	<10.0	<10.0		30	
1-Methylnaphthalene	ug/L	<10.0	<10.0		30	
2,2'-Oxybis(1-chloropropane)	ug/L	<10.0	<10.0		30	
2,3,4,6-Tetrachlorophenol	ug/L	<10.0	<10.0		30	
2,4,5-Trichlorophenol	ug/L	<10.0	<10.0		30	
2,4,6-Trichlorophenol	ug/L	<10.0	<10.0		30	
2,4-Dichlorophenol	ug/L	<10.0	<10.0		30	
2,4-Dimethylphenol	ug/L	<10.0	<10.0		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2509039

Parameter	Units	92418845012 Result	Dup Result	RPD	Max RPD	Qualifiers
2,4-Dinitrophenol	ug/L	<50.0	<50.0		30	
2,4-Dinitrotoluene	ug/L	<10.0	<10.0		30	
2,6-Dinitrotoluene	ug/L	<10.0	<10.0		30	
2-Chloronaphthalene	ug/L	<10.0	<10.0		30	
2-Chlorophenol	ug/L	<10.0	<10.0		30	
2-Methylnaphthalene	ug/L	<10.0	<10.0		30	
2-Methylphenol(o-Cresol)	ug/L	<10.0	<10.0		30	
2-Nitroaniline	ug/L	<50.0	<50.0		30	
2-Nitrophenol	ug/L	<10.0	<10.0		30	
3&4-Methylphenol(m&p Cresol)	ug/L	<10.0	<10.0		30	
3,3'-Dichlorobenzidine	ug/L	<20.0	<20.0		30	
3-Nitroaniline	ug/L	<50.0	<50.0		30	
4,6-Dinitro-2-methylphenol	ug/L	<20.0	<20.0		30	
4-Bromophenylphenyl ether	ug/L	<10.0	<10.0		30	
4-Chloro-3-methylphenol	ug/L	<20.0	<20.0		30	
4-Chloroaniline	ug/L	<20.0	<20.0		30	
4-Chlorophenylphenyl ether	ug/L	<10.0	<10.0		30	
4-Nitroaniline	ug/L	<20.0	<20.0		30	
4-Nitrophenol	ug/L	<50.0	<50.0		30	
Acenaphthene	ug/L	<10.0	<10.0		30	
Acenaphthylene	ug/L	<10.0	<10.0		30	
Acetophenone	ug/L	<10.0	<10.0		30	
Aniline	ug/L	<10.0	<10.0		30	
Anthracene	ug/L	<10.0	<10.0		30	
Atrazine	ug/L	<20.0	<20.0		30	
Benzaldehyde	ug/L	<20.0	<20.0		30	
Benzo(a)anthracene	ug/L	<10.0	<10.0		30	
Benzo(a)pyrene	ug/L	<10.0	<10.0		30	
Benzo(b)fluoranthene	ug/L	<10.0	<10.0		30	
Benzo(g,h,i)perylene	ug/L	<10.0	<10.0		30	
Benzo(k)fluoranthene	ug/L	<10.0	<10.0		30	
Benzoic Acid	ug/L	<50.0	<50.0		0	
Benzyl alcohol	ug/L	<20.0	<20.0		30	
Biphenyl (Diphenyl)	ug/L	<10.0	<10.0		30	
bis(2-Chloroethoxy)methane	ug/L	<10.0	<10.0		30	
bis(2-Chloroethyl) ether	ug/L	<10.0	<10.0		30	
bis(2-Ethylhexyl)phthalate	ug/L	<6.0	<6.0		30	
Butylbenzylphthalate	ug/L	<10.0	<10.0		30	
Caprolactam	ug/L	<10.0	<10.0		30	
Carbazole	ug/L	<10.0	<10.0		30	
Chrysene	ug/L	<10.0	<10.0		30	
Di-n-butylphthalate	ug/L	<10.0	<10.0		30	
Di-n-octylphthalate	ug/L	<10.0	<10.0		30	
Dibenz(a,h)anthracene	ug/L	<10.0	<10.0		30	
Dibenzofuran	ug/L	<10.0	<10.0		30	
Diethylphthalate	ug/L	<10.0	<10.0		30	
Dimethylphthalate	ug/L	<10.0	<10.0		30	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

SAMPLE DUPLICATE: 2509039

Parameter	Units	92418845012 Result	Dup Result	RPD	Max RPD	Qualifiers
Fluoranthene	ug/L	<10.0	<10.0		30	
Fluorene	ug/L	<10.0	<10.0		30	
Hexachloro-1,3-butadiene	ug/L	<10.0	<10.0		30	
Hexachlorobenzene	ug/L	<10.0	<10.0		30	
Hexachlorocyclopentadiene	ug/L	<10.0	<10.0		30	
Hexachloroethane	ug/L	<10.0	<10.0		30	
Indeno(1,2,3-cd)pyrene	ug/L	<10.0	<10.0		30	
Isophorone	ug/L	<10.0	<10.0		30	
N-Nitroso-di-n-propylamine	ug/L	<10.0	<10.0		30	
N-Nitrosodimethylamine	ug/L	<10.0	<10.0		30	
N-Nitrosodiphenylamine	ug/L	<10.0	<10.0		30	
Naphthalene	ug/L	<10.0	<10.0		30	
Nitrobenzene	ug/L	<10.0	<10.0		30	
Pentachlorophenol	ug/L	<25.0	<25.0		30	
Phenanthrene	ug/L	<10.0	<10.0		30	
Phenol	ug/L	<10.0	<10.0		30	
Pyrene	ug/L	<10.0	<10.0		30	
2,4,6-Tribromophenol (S)	%	101	77	27		
2-Fluorobiphenyl (S)	%	76	60	23		
2-Fluorophenol (S)	%	40	38	5		
Nitrobenzene-d5 (S)	%	77	66	16		
Phenol-d6 (S)	%	28	32	13		
Terphenyl-d14 (S)	%	85	67	24		

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460141 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Associated Lab Samples: 92418845001

METHOD BLANK: 2506979 Matrix: Water
Associated Lab Samples: 92418845001

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<5.0	5.0	1.0	02/26/19 11:15	

LABORATORY CONTROL SAMPLE: 2506980

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	49.9	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506981 2506982

Parameter	Units	92418327038 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	34.7	35.2	69	70	80-120	2	25	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506983 2506984

Parameter	Units	92418327048 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	45.6	50	50	87.4	86.5	84	82	80-120	1	25	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460142 Analysis Method: SM 2320B-2011
QC Batch Method: SM 2320B-2011 Analysis Description: 2320B Alkalinity
Associated Lab Samples: 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

METHOD BLANK: 2506985 Matrix: Water
Associated Lab Samples: 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<5.0	5.0	1.0	02/26/19 14:11	

LABORATORY CONTROL SAMPLE: 2506986

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	50	50.4	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506987 2506988

Parameter	Units	92418845002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	26.2	50	50	77.6	77.2	103	102	80-120	0	25	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506989 2506990

Parameter	Units	92418895001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	ND	50	50	34.6	34.9	69	70	80-120	1	25	M1

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460045 Analysis Method: SM 4500-Cl-E-2011
QC Batch Method: SM 4500-Cl-E-2011 Analysis Description: 4500 Chloride
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

METHOD BLANK: 2506657 Matrix: Water
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	<1.0	1.0	0.50	02/25/19 23:34	

LABORATORY CONTROL SAMPLE: 2506658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20	21.5	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506659 2506660

Parameter	Units	92418961001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	16200	10	10	16000	16000	-2020	-1620	90-110	0	10	M6

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2506661 2506662

Parameter	Units	92418845008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	5.8	10	10	16.2	16.2	104	104	90-110	0	10	

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REPORT OF LABORATORY ANALYSIS

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Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA

Project: Marsh Pamplico
Pace Project No.: 92418845

QC Batch: 460255 Analysis Method: SM 5310B-2011
QC Batch Method: SM 5310B-2011 Analysis Description: 5310B TOC
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

METHOD BLANK: 2507477 Matrix: Water
Associated Lab Samples: 92418845001, 92418845002, 92418845003, 92418845004, 92418845005, 92418845006, 92418845007, 92418845008, 92418845009

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	<1.0	1.0	0.50	02/27/19 13:20	

LABORATORY CONTROL SAMPLE: 2507478

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	25	25.3	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2507479 2507480

Parameter	Units	92418327054 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	ND	25	25	24.5	24.2	97	96	90-110	1	10	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2507481 2507482

Parameter	Units	92418845008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Total Organic Carbon	mg/L	1.4	25	25	25.6	24.8	97	94	90-110	3	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALIFIERS

Project: Marsh Pamplico
Pace Project No.: 92418845

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-A	Pace Analytical Services - Asheville
PASI-C	Pace Analytical Services - Charlotte

ANALYTE QUALIFIERS

L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.

Pace Analytical Services, LLC
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Marsh Pamplico
Pace Project No.: 92418845

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92418845001	**MW-13A**	EPA 3510C	460611	EPA 8270D	460792
92418845002	**MW-14A**	EPA 3510C	460611	EPA 8270D	460792
92418845003	**MW-21**	EPA 3510C	460611	EPA 8270D	460792
92418845004	**MW-25**	EPA 3510C	460611	EPA 8270D	460792
92418845005	**MW-26**	EPA 3510C	460611	EPA 8270D	460792
92418845006	**MW-27**	EPA 3510C	460611	EPA 8270D	460792
92418845007	**MW-28**	EPA 3510C	460611	EPA 8270D	460792
92418845008	**MW-29**	EPA 3510C	460611	EPA 8270D	460792
92418845009	**MW-30**	EPA 3510C	460314	EPA 8270D	460460
92418845010	**MW-3A**	EPA 3510C	459960	EPA 8270D	460107
92418845011	**MW-10**	EPA 3510C	460314	EPA 8270D	460460
92418845012	**MW-15**	EPA 3510C	460611	EPA 8270D	460792
92418845013	**MW-16**	EPA 3510C	460314	EPA 8270D	460460
92418845014	**MW-18B**	EPA 3510C	460314	EPA 8270D	460460
92418845015	**MW-19**	EPA 3510C	460314	EPA 8270D	460460
92418845016	**MW-20**	EPA 3510C	460611	EPA 8270D	460792
92418845001	**MW-13A**	SM 2320B-2011	460141		
92418845002	**MW-14A**	SM 2320B-2011	460142		
92418845003	**MW-21**	SM 2320B-2011	460142		
92418845004	**MW-25**	SM 2320B-2011	460142		
92418845005	**MW-26**	SM 2320B-2011	460142		
92418845006	**MW-27**	SM 2320B-2011	460142		
92418845007	**MW-28**	SM 2320B-2011	460142		
92418845008	**MW-29**	SM 2320B-2011	460142		
92418845009	**MW-30**	SM 2320B-2011	460142		
92418845001	**MW-13A**	SM 4500-Cl-E-2011	460045		
92418845002	**MW-14A**	SM 4500-Cl-E-2011	460045		
92418845003	**MW-21**	SM 4500-Cl-E-2011	460045		
92418845004	**MW-25**	SM 4500-Cl-E-2011	460045		
92418845005	**MW-26**	SM 4500-Cl-E-2011	460045		
92418845006	**MW-27**	SM 4500-Cl-E-2011	460045		
92418845007	**MW-28**	SM 4500-Cl-E-2011	460045		
92418845008	**MW-29**	SM 4500-Cl-E-2011	460045		
92418845009	**MW-30**	SM 4500-Cl-E-2011	460045		
92418845001	**MW-13A**	SM 5310B-2011	460255		
92418845002	**MW-14A**	SM 5310B-2011	460255		
92418845003	**MW-21**	SM 5310B-2011	460255		
92418845004	**MW-25**	SM 5310B-2011	460255		
92418845005	**MW-26**	SM 5310B-2011	460255		
92418845006	**MW-27**	SM 5310B-2011	460255		
92418845007	**MW-28**	SM 5310B-2011	460255		
92418845008	**MW-29**	SM 5310B-2011	460255		
92418845009	**MW-30**	SM 5310B-2011	460255		

REPORT OF LABORATORY ANALYSIS

Pace Analytical®	Document Name: Sample Condition Upon Receipt(SCUR)	Document Revised: February 7, 2018 Page 1 of 2
	Document No.: F-CAR-CS-033-Rev.06	Issuing Authority: Pace Carolinas Quality Office

Laboratory receiving samples:
Asheville ☐ Eden ☐ Greenwood ☐ Huntersville ☑ Raleigh ☐ Mechanicsville ☐

Sample Condition Upon Receipt

Client Name: SEME

Project #: WO# : 92418845

92418845

Courier: ☐ Commercial ☐ Fed Ex ☑ Pace ☐ UPS ☐ USPS ☐ Other:____ ☐ Client

Custody Seal Present? ☐ Yes ☑ No **Seals Intact?** ☐ Yes ☐ No

Date/Initials Person Examining Contents: LO 2-22-19

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Biological Tissue Frozen? ☐ Yes ☐ No ☑ N/A

Thermometer: ☑ IR Gun ID: 92T048 **Type of Ice:** ☐ Wet ☐ Blue ☐ None

Cooler Temp (°C): 4.4 3.3 **Correction Factor:** Add/Subtract (°C) 0.0

Cooler Temp Corrected (°C): _____

Temp should be above freezing to 6°C
☐ Samples out of temp criteria. Samples on ice, cooling process has begun

USDA Regulated Soil (☑ N/A, water sample)
Did samples originate in a quarantine zone within the United States: CA, NY, or SC (check maps)? ☐ Yes ☐ No

Did samples originate from a foreign source (internationally, including Hawaii and Puerto Rico)? ☐ Yes ☐ No

				Comments/Discrepancy:
Chain of Custody Present?	☑ Yes	☐ No	☐ N/A	1.
Samples Arrived within Hold Time?	☑ Yes	☐ No	☐ N/A	2.
Short Hold Time Analysis (<72 hr.)?	☐ Yes	☑ No	☐ N/A	3.
Rush Turn Around Time Requested?	☐ Yes	☑ No	☐ N/A	4.
Sufficient Volume?	☑ Yes	☐ No	☐ N/A	5.
Correct Containers Used?	☑ Yes	☐ No	☐ N/A	6.
-Pace Containers Used?	☑ Yes	☐ No	☐ N/A	
Containers Intact?	☑ Yes	☐ No	☐ N/A	7.
Dissolved analysis: Samples Field Filtered?	☐ Yes	☐ No	☑ N/A	8.
Sample Labels Match COC? -Includes Date/Time/ID/Analysis Matrix: WT	☑ Yes	☐ No	☐ N/A	9.
Headspace in VOA Vials (>5-6mm)?	☐ Yes	☑ No	☐ N/A	10.
Trip Blank Present?	☐ Yes	☐ No	☑ N/A	11. 2-22-19
Trip Blank Custody Seals Present?	☐ Yes	☐ No	☑ N/A	

COMMENTS/SAMPLE DISCREPANCY

Field Data Required? ☐ Yes ☐ No

TB not on COC

Lot ID of split containers:

CLIENT NOTIFICATION/RESOLUTION

Person contacted: _____ Date/Time: _____

Project Manager SCURF Review: AMB **Date:** 2-24-19

Project Manager SRF Review: AMB **Date:** 2-24-19

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # WO#: 92418845

PM: AMB Due Date: 03/01/19

CLIENT: 92-S&ME Gbor

Pg 1

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1										2																			
2										2																			
3		2								2									3										
4		2								2									3										
5										2																			
6										2																			
7										2																			
8										2																			
9										2																			
10		2								2									3										
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

***Check mark top half of box if pH and/or dechlorination is verified and within the acceptance range for preservation samples.**

Exceptions: VOA, Coliform, TOC, Oil and Grease, DRO/8015 (water) DOC, LLHg

****Bottom half of box is to list number of bottle**

Project # WO#: 92418845

PM: AMB Due Date: 03/01/19

CLIENT: 92-S&ME Gbor

Item#	BP4U-125 mL Plastic Unpreserved (N/A) (Cl-)	BP3U-250 mL Plastic Unpreserved (N/A)	BP2U-500 mL Plastic Unpreserved (N/A)	BP1U-1 liter Plastic Unpreserved (N/A)	BP4S-125 mL Plastic H2SO4 (pH < 2) (Cl-)	BP3N-250 mL plastic HNO3 (pH < 2)	BP4Z-125 mL Plastic ZN Acetate & NaOH (>9)	BP4C-125 mL Plastic NaOH (pH > 12) (Cl-)	WGFU-Wide-mouthed Glass jar Unpreserved	AG1U-1 liter Amber Unpreserved (N/A) (Cl-)	AG1H-1 liter Amber HCl (pH < 2)	AG3U-250 mL Amber Unpreserved (N/A) (Cl-)	AG1S-1 liter Amber H2SO4 (pH < 2)	AG3S-250 mL Amber H2SO4 (pH < 2)	AG3A(DG3A)-250 mL Amber NH4Cl (N/A)(Cl-)	DG9H-40 mL VOA HCl (N/A)	VG9T-40 mL VOA Na2S2O3 (N/A)	VG9U-40 mL VOA Unp (N/A)	DG9P-40 mL VOA H3PO4 (N/A)	VOAK (6 vials per kit)-5035 kit (N/A)	V/GK (3 vials per kit)-VPH/Gas kit (N/A)	SP5T-125 mL Sterile Plastic (N/A – lab)	SP2T-250 mL Sterile Plastic (N/A – lab)		BP3A-250 mL Plastic (NH2)2SO4 (9.3-9.7)	AG0U-100 mL Amber Unpreserved vials (N/A)	VSGU-20 mL Scintillation vials (N/A)	DG9U-40 mL Amber Unpreserved vials (N/A)
1																													
2		2								2									3										
3		2								2									3										
4		2								2									3										
5		2								2									3										
6		2								2									3										
7		2								2									3										
8																STB													
9																													
10																													
11																													
12																													

pH Adjustment Log for Preserved Samples

Sample ID	Type of Preservative	pH upon receipt	Date preservation adjusted	Time preservation adjusted	Amount of Preservative added	Lot #

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. Out of hold, incorrect preservative, out of temp, incorrect containers.

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	S&ME, Inc.	Report To:	Ed Henriques	Attention:	
Address:	8646 West Market St., Suite 105	Copy To:		Company Name:	
	Greensboro, NC 27409			Address:	
Email To:	ehenriques@smeinc.com	Purchase Order No.:	1584-98-146C	Pace Quote Reference:	
Phone:	336-288-7180 Fax:	Project Name:	Marsh Pamplico	Pace Project Manager:	
Requested Due Date/TAT:		Project Number:	1584-98-146C	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: Alkalinity, Chloride	TOC	SVOC's 8270 BNA	Residual Chlorine (Y/N)	92418845 Pace Project No./ Lab I.D.
1	MW-3A	WT	G			02/18/19	16:55		2								X				X			010
2	MW-10	WT	G			02/19/19	14:00		2								X				X			011
3	MW-13A	WT	G			02/21/19	16:00		7								X		X	X	X			001
4	MW-14A	WT	G			02/20/19	11:35		7								X		X	X	X			002
5	MW-15	WT	G			02/20/19	12:40		2								X				X			012
6	MW-16	WT	G			02/19/19	8:05		2								X				X			013
7	MW-18B	WT	G			02/19/19	12:05		2								X				X			014
8	MW-19	WT	G			02/19/19	9:45		2								X				X			015
9	MW-20	WT	G			02/20/19	14:40		2								X				X			016
10	MW-21	WT	G			02/21/19	12:00		7								X		X	X	X			003
11	~~MW-22~~	WT	G			02/18/19	12:05		7								X		X	X	X			
12	~~MW-23~~	WT	G			02/18/19	14:25		7								X		X	X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
		2/21/19	17:45		2-22-19	9:36				
		2-22-19	10:45		2-22-19	15:45	1.3 3.2	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Gary Simcox

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 2/21/19

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.08, 12-Oct-2007

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	S&ME, Inc.	Report To:	Ed Henriques	Attention:	
Address:	8646 West Market St., Suite 105	Copy To:		Company Name:	
	Greensboro, NC 27409			Address:	
Email To:	ehenriques@smeinc.com	Purchase Order No.:	1584-98-146C	Pace Quote Reference:	
Phone:	336-288-7180 Fax:	Project Name:	Marsh Pamplico	Pace Project Manager:	
Requested Due Date/TAT:		Project Number:	1584-98-146C	Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: SC

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OT; TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis Filtered (Y/N) ↓ Analysis Test ↓	Alkalinity, Chloride	TOC	SVOC's 8270 BNA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 924/8845
1	~~MW-24~~	WT	G			02/18/19	10:20		7								X		X	X	X		
2	MW-25	WT	G			02/20/19	16:40		7								X		X	X	X		004
3	MW-26	WT	G			02/21/19	8:35		7								X		X	X	X		005
4	MW-27	WT	G			02/20/19	8:10		7								X		X	X	X		006
5	MW-28	WT	G			02/21/19	10:20		7								X		X	X	X		007
6	MW-29	WT	G			02/21/19	14:10		7								X		X	X	X		008
7	MW-30	WT	G			02/19/19	15:50		7								X		X	X	X		009
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples intact (Y/N)
		2/21/19	17:45		2/21/19	924				
	Pace	2/22/19	1545		2/22/19	1545	4.3 2.3	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Gary Simcox

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 2/21/19

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Appendix III – Historic Data

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-1	1/6/1993	100.39	6.73	93.66	LAW
	10/18/1993	100.39	8.08	92.31	LAW
	11/11/1993	100.39	7.92	92.47	LAW
	1/5/1999	100.39	7.80	92.59	S&ME
	8/16/2000	100.39	7.66	92.73	S&ME
	3/28/2001	100.39	7.76	92.63	S&ME
	10/22/2001	100.39	10.05	90.34	S&ME
	4/24/2002	100.39	8.83	91.56	S&ME
	10/22/2002	100.39	8.32	92.07	S&ME
	5/20/2003	100.39	7.42	92.97	S&ME
	12/11/2003	100.39	7.59	92.80	S&ME
	5/25/2004	100.39	8.18	92.21	S&ME
	12/14/2004	100.39	7.44	92.95	S&ME
	6/15/2005	100.39	7.08	93.31	S&ME
	12/19/2005	100.39	6.98	93.41	S&ME
	7/21/2006	100.39	7.84	92.55	S&ME
	1/24/2007	100.39	7.69	92.70	S&ME
	10/3/2007	100.39	9.51	90.88	S&ME
	7/24/2008	100.39	8.64	91.75	S&ME
	1/8/2009	100.39	7.75	92.64	S&ME
	1/7/2010	100.39	7.28	93.11	S&ME
	6/23/2010	100.39	7.67	92.72	S&ME
	5/25/2011	100.39	7.42	92.97	S&ME
	5/16/2013	100.39	7.82	92.57	S&ME
	2/5/2016	100.39	5.30	95.09	S&ME
	2/21/2017	85.55	7.25	78.30	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-3	1/6/1993	99.13	7.88	91.25	LAW
	10/18/1993	99.13	8.52	90.61	LAW
	11/11/1993	99.13	8.47	90.66	LAW
	1/5/1999	99.13	8.87	90.26	S&ME
	8/16/2000	99.13	8.14	90.99	S&ME
	3/28/2001	99.13	8.04	91.09	S&ME
	10/22/2001	99.13	9.43	89.7	S&ME
	4/24/2002	99.13	8.86	90.27	S&ME
	10/22/2002	99.13	8.61	90.52	S&ME
	5/20/2003	99.13	8.03	91.10	S&ME
	12/11/2003	99.13	8.30	90.83	S&ME
	5/25/2004	99.13	well damaged	no data	S&ME
*	12/14/2004	99.11	8.26	90.85	S&ME
*	6/15/2005	99.11	7.81	91.30	S&ME
*	12/19/2005	99.11	8.08	91.03	S&ME
*	8/22/2006	99.11	8.14	90.97	S&ME
*	1/24/2007	99.11	7.68	91.43	S&ME
*	10/3/2007	99.11	9.05	90.06	S&ME
*	7/24/2008	99.11	8.74	90.37	S&ME
*	1/8/2009	99.11	8.26	90.85	S&ME
*	1/7/2010	99.11	8.06	91.05	S&ME
*	6/23/2010	99.11	8.25	90.86	S&ME
*	5/25/2011	99.11	7.91	91.20	S&ME
*	5/16/2013	99.11	8.65	90.46	S&ME
*	2/5/2016	99.11	3.11	96.00	S&ME
*	2/21/2017	88.59	11.54	77.05	S&ME
*	3/14/2018	88.59	11.37	77.22	S&ME
*	2/18/2019	88.59	11.35	77.24	S&ME

* = MW-3 replaced by MW-3A

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-9	10/18/1993	97.97	7.91	90.06	LAW
	11/11/1993	97.97	7.86	90.11	LAW
	1/5/1999	97.97	8.11	89.86	S&ME
	8/16/2000	97.97	7.42	90.55	S&ME
	3/28/2001	97.97	7.32	90.65	S&ME
	10/22/2001	97.97	8.62	89.35	S&ME
	4/24/2002	97.97	8.22	89.75	S&ME
	10/22/2002	97.97	8.03	89.94	S&ME
	5/20/2003	97.97	7.70	90.27	S&ME
	12/11/2003	97.97	7.87	90.10	S&ME
	5/25/2004	97.97	7.84	90.13	S&ME
	12/14/2004	97.97	7.65	90.32	S&ME
	6/15/2005	97.97	7.79	90.18	S&ME
	12/19/2005	97.97	8.04	89.93	S&ME
	7/20/2006	97.97	7.98	89.99	S&ME
	1/24/2007	97.97	7.81	90.16	S&ME
	10/3/2007	97.97	8.54	89.43	S&ME
	7/24/2008	98.51	8.41	90.10	S&ME
	1/8/2009	98.51	8.11	90.40	S&ME
	1/7/2010	98.51	7.99	90.52	S&ME
	6/23/2010	98.51	8.03	90.48	S&ME
	5/25/2011	98.51	not found	not found	not found
	5/16/2013	98.51	7.92	90.59	S&ME
	2/5/2016	98.51	6.48	92.03	S&ME
	2/21/2017	83.5	7.51	75.99	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-10	10/18/1993	93.42	4.86	88.56	LAW
	11/11/1993	93.42	4.98	88.44	LAW
	1/5/1999	93.42	4.19	89.23	S&ME
	8/16/2000	93.42	4.59	88.83	S&ME
	3/28/2001	93.42	4.51	88.91	S&ME
	10/22/2001	93.42	6.72	86.70	S&ME
	4/24/2002	93.42	5.64	87.78	S&ME
	10/22/2002	93.42	5.25	88.17	S&ME
	5/20/2003	93.42	4.25	89.17	S&ME
	12/11/2003	93.42	4.26	89.16	S&ME
	5/25/2004	93.42	4.92	88.50	S&ME
	12/15/2004	93.42	4.06	89.36	S&ME
	6/15/2005	93.42	3.80	89.62	S&ME
	12/19/2005	93.42	3.64	89.78	S&ME
	7/20/2006	93.42	4.74	88.68	S&ME
	1/24/2007	93.42	3.09	90.33	S&ME
	10/3/2007	93.42	5.08	88.34	S&ME
	7/24/2008	93.93	5.48	88.45	S&ME
	1/8/2009	93.93	3.99	89.94	S&ME
	1/7/2010	93.93	3.51	90.42	S&ME
	6/23/2010	93.93	4.73	89.20	S&ME
	5/25/2011	93.93	4.20	89.73	S&ME
	5/16/2013	93.93	4.45	89.48	S&ME
	2/5/2016	93.93	1.21	92.72	S&ME
	9/14/2016	83.30	6.77	76.53	S&ME
	12/8/2016	83.30	8.22	75.08	S&ME
	2/21//17	83.30	8.47	74.83	S&ME
	5/24/2017	83.30	8.70	74.60	S&ME
	8/30/2017	83.30	8.84	74.46	S&ME
	3/14/2018	83.30	8.35	74.95	S&ME
	6/26/2018	83.30	9.34	73.96	S&ME
	9/19/2018	83.30	7.45	75.85	S&ME
	2/19/2019	83.30	8.07	75.23	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-11	10/18/1993	97.45	7.59	89.86	LAW
	11/11/1993	97.45	7.43	90.02	LAW
	1/5/1999	97.45	7.58	89.87	S&ME
	8/16/2000	97.45	7.04	90.41	S&ME
	3/28/2001	97.45	7.14	90.31	S&ME
	10/22/2001	97.45	8.26	89.19	S&ME
	4/24/2002	97.45	7.74	89.71	S&ME
	10/22/2002	97.45	7.50	89.95	S&ME
	5/20/2003	97.45	6.93	90.52	S&ME
	12/11/2003	97.45	7.20	90.25	S&ME
	5/25/2004	97.45	7.38	90.07	S&ME
	12/115/04	97.45	7.12	90.33	S&ME
	6/15/2005	97.45	6.72	90.73	S&ME
	12/19/2005	97.45	6.97	90.48	S&ME
	7/20/2006	97.45	7.18	90.27	S&ME
	1/24/2007	97.45	6.60	90.85	S&ME
	10/3/2007	97.45	7.91	89.54	S&ME
	7/24/2008	97.45	7.63	89.82	S&ME
	1/8/2009	97.45	7.12	90.33	S&ME
	1/7/2010	97.45	6.88	90.57	S&ME
	6/23/2010	97.45	7.14	90.31	S&ME
	5/25/2011	97.45	6.92	90.53	S&ME
	5/16/2013	97.45	7.08	90.37	S&ME
	2/5/2016	97.45	2.45	95.00	S&ME
	2/21//17	85.61	8.42	77.19	S&ME
	3/14/2018	85.61	8.07	77.54	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-13	8/16/2000	93.18	5.09	88.09	S&ME
	3/28/2001	93.18	5.19	87.99	S&ME
	10/22/2001	93.18	5.43	87.75	S&ME
	4/24/2002	93.18	5.21	87.97	S&ME
	10/22/2002	93.18	5.15	88.03	S&ME
	5/20/2003	93.18	4.69	88.49	S&ME
	12/11/2003	93.18	4.52	88.66	S&ME
	5/25/2004	93.18	well damaged	no data	S&ME
**	12/15/2004	94.16	6.29	87.87	S&ME
**	6/15/2005	94.16	5.64	88.52	S&ME
**	12/19/2005	94.16	5.89	88.27	S&ME
**	7/20/2006	94.16	5.91	88.25	S&ME
**	1/24/2007	94.16	5.82	88.34	S&ME
**	10/3/2007	94.16	6.22	87.94	S&ME
**	7/24/2008	94.19	5.61	88.58	S&ME
**	1/8/2009	94.19	5.27	88.92	S&ME
**	1/7/2010	94.19	5.29	88.9	S&ME
**	6/23/2010	94.19	5.56	88.63	S&ME
**	5/25/2011	94.19	5.37	88.82	S&ME
**	5/16/2013	94.19	5.36	88.83	S&ME
**	2/5/2016	94.19	3.03	91.16	S&ME
**	2/21/2017	83.52	7.04	76.48	S&ME
**	11/3/2017	83.52	8.35	75.17	S&ME
**	3/13/2018	83.52	6.90	76.62	S&ME
**	9/20/2018	83.52	6.19	77.33	S&ME
**	2/21/2019	83.52	6.75	76.77	S&ME

** = MW-13 replaced with MW-13A

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-14	8/16/2000	93.02	4.59	88.43	S&ME
	3/28/2001	93.02	4.49	88.53	S&ME
	10/22/2001	93.02	5.60	87.42	S&ME
	4/24/2002	93.02	5.00	88.02	S&ME
	10/22/2002	93.02	4.93	88.09	S&ME
	5/20/2003	93.02	4.61	88.41	S&ME
	12/11/2003	93.02	4.86	88.16	S&ME
	5/25/2004	93.02	4.79	88.23	S&ME
	12/15/2004	93.02	4.88	88.14	S&ME
	6/15/2005	93.02	4.55	88.47	S&ME
	12/19/2005	93.02	5.65	87.37	S&ME
	7/20/2006	93.02	well not found	no data	S&ME
	1/24/2007	93.02	4.42	88.60	S&ME
	10/3/2007	92.94	4.79	88.15	S&ME
	7/24/2008	93.02	4.69	88.33	S&ME
	1/8/2009	93.02	4.61	88.41	S&ME
	1/7/2010	93.02	5.04	87.98	S&ME
	6/23/2010	93.02	4.43	88.59	S&ME
	5/25/2011	93.02	4.31	88.71	S&ME
	5/16/2013	93.02	4.49	88.53	S&ME
	2/5/2016	93.02	2.15	90.87	S&ME
	9/16/2016	81.11	5.51	75.60	S&ME
	12/8/2016	81.11	5.97	75.14	S&ME
	2/21/2017	81.11	7.05	74.06	S&ME
	6/7/2017	81.11	5.19	75.92	S&ME
	8/30/2017	81.11	5.88	75.23	S&ME
	3/14/2018	81.11	4.55	76.56	S&ME
	6/26/2018	81.11	5.52	75.59	S&ME
	9/21/2018	81.11	4.21	76.90	S&ME
	2/20/2019	81.11	4.59	76.52	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-15	8/16/2000	92.74	6.04	86.70	S&ME
	3/28/2001	92.74	6.14	86.60	S&ME
	10/22/2001	92.74	6.66	86.08	S&ME
	4/24/2002	92.74	6.35	86.39	S&ME
	10/22/2002	92.74	6.36	86.38	S&ME
	5/20/2003	92.74	5.69	87.05	S&ME
	12/11/2003	92.74	5.99	86.75	S&ME
	5/25/2004	92.74	5.93	86.81	S&ME
	12/15/2004	92.74	5.91	86.83	S&ME
	6/15/2005	92.74	5.43	87.31	S&ME
	12/19/2005	92.74	5.72	87.02	S&ME
	7/21/2006	92.74	5.71	87.03	S&ME
	1/24/2007	92.74	5.38	87.36	S&ME
	10/3/2007	92.74	6.30	86.44	S&ME
	7/24/2008	92.95	6.15	86.80	S&ME
	1/8/2009	92.95	5.63	87.32	S&ME
	1/7/2010	92.95	5.75	87.20	S&ME
	6/23/2010	92.95	5.72	87.23	S&ME
	5/25/2011	92.95	5.52	87.43	S&ME
	5/16/2013	92.95	5.72	87.23	S&ME
	2/5/2016	92.95	4.65	88.30	S&ME
	9/14/2016	82.32	8.34	73.98	S&ME
	12/8/2016	82.32	8.64	73.68	S&ME
	2/21/2017	82.32	9.34	72.98	S&ME
	5/23/2017	82.32	9.14	73.18	S&ME
	8/30/2017	82.32	9.31	73.01	S&ME
	3/13/2018	82.32	8.37	73.95	S&ME
	9/19/2018	82.32	8.91	73.41	S&ME
	2/20/2019	82.32	8.89	73.43	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-16	8/16/2000	94.76	5.37	89.39	S&ME
	3/28/2001	94.76	5.27	89.49	S&ME
	10/22/2001	94.76	6.25	88.51	S&ME
	4/24/2002	94.76	5.87	88.89	S&ME
	10/22/2002	94.76	5.86	88.90	S&ME
	5/20/2003	94.76	5.18	89.58	S&ME
	12/11/2003	94.76	5.41	89.35	S&ME
	5/25/2004	94.76	5.30	89.46	S&ME
	12/15/2004	94.76	5.24	89.52	S&ME
	6/15/2005	94.76	4.92	89.84	S&ME
	12/19/2005	94.76	5.30	89.46	S&ME
	7/20/2006	94.76	5.14	89.62	S&ME
	1/24/2007	94.76	5.03	89.73	S&ME
	10/3/2007	94.76	5.62	89.14	S&ME
	7/24/2008	94.74	5.43	89.31	S&ME
	1/8/2009	94.74	4.51	90.23	S&ME
	1/7/2010	94.74	5.16	89.58	S&ME
	1/7/2010	94.74	5.04	89.70	S&ME
	5/25/2011	94.74	4.85	89.89	S&ME
	5/16/2013	94.74	4.99	89.75	S&ME
	2/5/2016	94.74	3.30	91.44	S&ME
	2/21/2017	83.65	8.36	75.29	S&ME
	3/14/2018	83.65	8.26	75.39	S&ME
	2/19/2019	83.65	8.22	75.43	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-17	3/28/2007	94.66	6.49	88.17	S&ME
	10/3/2007	94.66	8.00	86.66	S&ME
	7/24/2008	94.70	7.71	86.99	S&ME
	1/8/2009	94.70	5.92	88.78	S&ME
	1/7/2010	94.70	5.61	89.09	S&ME
	6/23/2010	94.70	6.74	87.96	S&ME
	5/25/2011	94.70	5.92	88.78	S&ME
	5/16/2013	94.70	6.13	88.57	S&ME
	2/5/2016	94.70	1.95	92.75	S&ME
MW-17A	9/15/2016	82.37	8.91	73.46	S&ME
MW-17A	2/21/2017	82.37	9.65	72.72	S&ME
MW-17A	3/14/2018	82.37	9.70	72.67	S&ME
MW-18A	1/8/2009	90.77	4.71	86.06	S&ME
	1/7/2010	90.77	4.27	86.50	S&ME
	6/23/2010	90.77	4.53	86.24	S&ME
	5/25/2011	90.77	4.27	86.50	S&ME
	5/16/2013	90.77	4.45	86.32	S&ME
	2/5/2016	90.77	2.07	88.70	S&ME
	2/21/2017	80.27	8.75	71.52	S&ME
	3/14/2018	80.27	8.34	71.93	S&ME
MW-18B	1/8/2009	90.97	3.17	87.80	S&ME
	1/7/2010	90.97	1.86	89.11	S&ME
	6/23/2010	90.97	3.38	87.59	S&ME
	5/25/2011	90.97	2.72	88.25	S&ME
	5/16/2013	90.97	3.01	87.96	S&ME
	2/5/2016	90.97	0.00	90.97	S&ME
	2/21/2017	80.17	7.11	73.06	S&ME
	3/14/2018	80.17	7.07	73.10	S&ME
	2/19/2019	80.17	6.73	73.44	S&ME
MW-19	9/15/2016	79.56	5.76	73.80	S&ME
	2/12/2017	79.56	5.73	73.83	S&ME
	3/14/2018	79.56	5.89	73.67	S&ME
	2/19/2019	79.56	5.46	74.10	S&ME
MW-20	9/15/2016	80.59	7.37	73.22	S&ME
	2/12/2017	80.59	7.71	72.88	S&ME
	3/14/2018	80.59	7.17	73.42	S&ME
	9/19/2018	80.59	6.63	73.96	S&ME
	2/19/2019	80.59	6.87	73.72	S&ME
BSW-2	1/7/2010	100.32	8.40	91.92	S&ME
	6/23/2010	100.32	8.53	91.79	S&ME
	5/25/2011	100.32	8.50	91.82	S&ME
	5/16/2013	100.32	8.78	91.54	S&ME
	2/5/2016	100.32	5.89	94.43	S&ME
	2/21/2017	100.32	7.98	92.34	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-21	9/15/2016	84.04	7.94	76.10	S&ME
	12/14/2016	84.04	6.10	77.94	S&ME
	2/21/2017	84.04	7.66	76.38	S&ME
	5/24/2017	84.04	7.67	76.37	S&ME
	8/30/2017	84.04	8.11	75.93	S&ME
	3/14/2018	84.04	7.13	76.91	S&ME
	2/21/2019	84.04	7.20	76.84	S&ME
MW-22	9/15/2016	81.74	5.79	75.95	S&ME
	12/8/2016	81.74	5.56	76.18	S&ME
	2/21/2017	81.74	5.87	75.87	S&ME
	5/24/2017	81.74	6.21	75.53	S&ME
	8/30/2017	81.74	6.39	75.35	S&ME
	3/14/2018	81.74	5.73	76.01	S&ME
	6/26/2018	81.74	6.84	74.90	S&ME
	9/20/2018	81.74	4.76	76.98	S&ME
	2/18/2019	81.74	5.67	76.07	S&ME
MW-23	9/15/2016	81.37	7.57	73.8	S&ME
	12/13/2016	81.37	7.20	74.17	S&ME
	2/21/2017	81.37	7.62	73.75	S&ME
	5/23/2017	81.37	7.79	73.58	S&ME
	8/30/2017	81.37	8.03	73.34	S&ME
	3/14/2018	81.37	7.30	74.07	S&ME
	9/21/2018	81.37	7.79	73.58	S&ME
	2/18/2019	81.37	7.39	73.98	S&ME
MW-24	5/24/2017	81.23	5.89	75.34	S&ME
	8/30/2017	81.23	6.53	74.70	S&ME
	3/14/2018	81.23	5.56	75.67	S&ME
	6/27/2018	81.23	6.44	74.79	S&ME
	9/21/2018	81.23	6.48	74.75	S&ME
	2/18/2019	81.23	5.58	75.65	S&ME

TABLE III-1
GROUNDWATER ELEVATION DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Well Location	Date	Top of Casing Elevation (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	Data Collected By
MW-25	11/2/2017	80.49	6.30	74.19	S&ME
	3/14/2018	80.49	5.02	75.47	S&ME
	6/26/2018	80.49	5.89	74.60	S&ME
	9/20/2018	80.49	5.02	75.47	S&ME
	2/20/2019	80.49	5.01	75.48	S&ME
MW-26	11/2/2017	81.21	7.08	74.13	S&ME
	3/14/2018	81.21	5.75	75.46	S&ME
	6/27/2018	81.21	6.54	74.67	S&ME
	9/20/2018	81.21	5.84	75.37	S&ME
	2/21/2019	81.21	5.7	75.51	S&ME
MW-27	11/2/2017	82.20	7.60	74.60	S&ME
	3/14/2018	82.20	6.29	75.91	S&ME
	6/26/2018	82.20	7.07	75.13	S&ME
	9/19/2018	82.20	5.49	76.71	S&ME
	2/20/2019	82.20	6.16	76.04	S&ME
MW-28	11/3/2017	83.03	7.95	75.08	S&ME
	3/14/2018	83.03	6.31	76.72	S&ME
	6/27/2018	83.03	7.39	75.64	S&ME
	9/20/2018	83.03	5.29	77.74	S&ME
	2/21/2019	83.03	6.46	76.57	S&ME
MW-29	11/3/2017	82.90	7.76	75.14	S&ME
	3/14/2018	82.90	6.23	76.67	S&ME
	9/20/2018	82.90	5.29	77.61	S&ME
	2/21/2019	82.90	6.11	76.79	S&ME
MW-30	11/3/2017	81.58	6.25	75.33	S&ME
	3/13/2018	81.58	5.06	76.52	S&ME
	6/27/2018	81.58	5.98	75.60	S&ME
	9/20/2018	81.58	4.51	77.07	S&ME
	2/19/2019	81.58	4.98	76.60	S&ME

1) Groundwater depths measured from the top of the PVC well casings

2) Elevations are referenced prior to September 2016 relied upon an assumed site datum (southeast corner of the concrete slab at the Pre-Dryer Building = 100.00 feet). In 2016 Nesbitt Surveying Co. Inc. was contracted to survey existing wells and update the well top of casing elevations. The 2016 survey occurred after existing monitoring wells were converted from flush mount wells over to monitoring wells with above grade post-type well covers.

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-1	1/6/1993	nd	nd	nd	nd	nd	not requested	not requested
	2/10/1993	nd	nd	nd	nd	nd	not requested	not requested
	10/18/1993	nd	nd	nd	nd	nd	not requested	not requested
	1/5/1999	nd	nd	nd	nd	nd	not requested	not requested
	8/16/2000	<50	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	<20	<10	<10	<10	<10	not requested	not requested
	10/22/2001	<20	<10	<10	<10	<10	not requested	not requested
	4/24/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/14/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/21/2006	<20	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/3/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-2	1/6/1993	nd	nd	nd	nd	nd	not requested	not requested
	10/18/1993	nd	nd	nd	nd	nd	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
MW-4	1/6/1993	nd	nd	nd	nd	nd	not requested	not requested
	10/18/1993	nd	nd	nd	nd	nd	not requested	not requested
MW-8	1/5/1999	nd	nd	nd	nd	nd	not requested	not requested
	8/16/2000	**320**	ANR	<10	<10	<10	not requested	not requested
MW-12	10/18/1993	nd	**22**	nd	nd	nd	not requested	not requested
	7/24/1998	nd	nt	nd	nd	nd	not requested	not requested
DS-1	8/22/2006	<20	ANR	<10	<10	ANR	not requested	not requested
DS-2	8/22/2006	<20	ANR	<10	<10	ANR	not requested	not requested
DS-3D	8/22/2006	<20	ANR	<10	<10	ANR	not requested	not requested
BSW-2	3/5/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	7/13/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	10/1/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-3	1/6/1993	**4000**	nd	**13**	**14**	**380**	not requested	not requested
	2/10/1993	**4300**	nd	**11**	**15**	**290**	not requested	not requested
	10/18/1993	**3000**	nd	nd	nd	**170**	not requested	not requested
	7/24/1998	**215**	nt	nd	nd	nd	not requested	not requested
	1/5/1999	**271**	nt	nd	nd	nd	not requested	not requested
	4/27/1999	**145**	nt	nd	nd	nd	**17**	**15**
	8/16/2000	**230**	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	**128**	<10	<10	<10	<10	not requested	not requested
	10/22/2001	**134**	<10	<10	<10	<10	not requested	not requested
	4/24/2002	**166**	ANR	<50	<50	ANR	not requested	not requested
	10/22/2002	**201**	ANR	<20	<20	ANR	not requested	not requested
	5/20/2003	**193/"194"**	ANR	<20	<20	ANR	not requested	not requested
	12/11/2003	**295**	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	well not found	well not found	well not found	well not found	well not found	well not found	well not found
MW-3A	12/15/2004	**795**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	6/15/2005	**360**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	12/19/2005	**204**	ANR	<10	<10	ANR	not detected	not detected
MW-3A	8/22/2006	**169**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	1/24/2007	**112**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	10/3/2007	**117**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	7/24/2008	**71**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	1/8/2009	**115**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	7/13/2009	**268**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	10/1/2009	**303**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	1/7/2010	**307**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	6/23/2010	**35.8 J**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	5/25/2011	**13.9 J**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	5/16/2013	**5 J**	ANR	<10	<10	ANR	not requested	not requested
MW-3A	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-3A	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-3A	3/13/2018	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-3A	2/18/2019	<24.8	<5.9	<9.8	<9.8	<9.8	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

MW-3 damaged and replaced with MW-3A

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-9	10/18/1993	nd	**21**	nd	nd	nd	not requested	not requested
	1/5/1999	nd	nt	nd	nd	nd	not requested	not requested
	8/16/2000	<50	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	<20	<10	<10	<10	<10	not requested	not requested
	10/22/2001	<20	<10	<10	<10	<10	not requested	not requested
	4/24/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/14/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/20/2006	<20	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/3/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	**2 J**	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-10	10/18/1993	**62**	**18**	nd	nd	nd	not requested	not requested
	7/24/1998	**76**	nd	nd	nd	nd	not requested	not requested
	1/5/1999	**58**	nt	nd	nd	nd	not requested	not requested
	4/27/1999	**35**	nt	nd	nd	nd	not detected	not detected
	8/16/2000	**53**	ANR	<10	<10	<10	not detected	not detected
	3/28/2001	<20	<10	<10	<10	<10	not detected	not detected
	10/22/2001	**185**	<10	<10	<10	<10	not requested	not requested
	4/24/2002	**240 / {220}**	ANR	<50	<50	ANR	not requested	not requested
	10/22/2002	**155/ {241}**	ANR	<20	<20	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	**10 J**	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/15/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	**11**	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	**8.4 J**	ANR	<10	<10	ANR	not detected	not detected
	7/20/2006	**2 J**	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/3/2007	**128**	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	**90**	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	**7 J**	ANR	<10	<10	ANR	not requested	not requested
	3/5/2009	**5 J**	ANR	<10	**3 J**	ANR	not requested	not requested
	1/7/2010	**5 J**	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	**1.8 J**	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	**2 J**	ANR	**2 J**	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	9/14/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	12/8/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	**16.0 J**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	5/24/2017	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	8/30/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<52.1	<6.3	<10.4	<10.4	<10.4	not detected	not detected
	6/26/2018	30.4	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/19/2018	<25.5	<6.1	<10.2	<10.2	<10.2	not requested	not requested
	2/19/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-11	10/18/1993	nd	**14**	nd	nd	nd	not requested	not requested
	1/5/1999	nd	nt	nd	nd	nd	not requested	not requested
	8/16/2000	**19**	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	<20	<10	<10	<10	<10	not requested	not requested
	10/22/2001	<20	<10	<10	<10	<10	not requested	not requested
	4/24/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/15/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/20/2006	<20	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/4/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-13	8/16/2000	<50	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	<20	<10	<10	<10	<10	not requested	not requested
	10/22/2001	<20	<10	<10	<10	<10	not requested	not requested
	4/24/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/15/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/20/2006	<20	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/3/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-13A	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-13A	11/3/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-13A	3/13/2018	<50	<6.0	<10.0	<10.0	<10.0	not detected	not detected
MW-13A	9/20/2018	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-13A	2/21/2019	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

MW-13 damaged and replaced with MW-13A

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-14	8/16/2000	**1100**	ANR	<10	<10	**15**	not requested	not requested
	3/28/2001	**734**	<10	<10	<10	<10	not requested	not requested
	10/22/2001	**2020**	<10	<10	<10	<10	not requested	not requested
	4/24/2002	**595 / (950)**	ANR	<400	<400	ANR	not requested	not requested
	10/22/2002	**741/ {908}**	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	**557/"576"**	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	**650**	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	**590**	ANR	<10	<10	ANR	not requested	not requested
	12/15/2004	**625**	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	**482**	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	**411**	ANR	<10	<10	ANR	not detected	**13**
	7/20/2006	well not found	well not found	well not found	well not found	well not found	well not found	well not found
	1/24/2007	**584**	ANR	<10	<10	ANR	not requested	not requested
	10/4/2007	**42**	ANR	<10	**11**	ANR	not requested	not requested
	7/24/2008	**264**	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	**142**	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	**129**	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	**133**	ANR	<10	**2.0 J**	ANR	not requested	not requested
	5/25/2011	**371**	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	**333**	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	**214 / (279)**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	9/14/2016	**214**	<6.0	<10.0	<10.0	<10.0	not detected	**11.5 J**
	12/13/2016	<250	<30	<50	<50	<50	not requested	not requested
	2/21/2017	<250 / (<250)	<60.0	<100	<100	<100	not requested	not requested
MW-14A	6/7/2017	**122**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-14A	8/30/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-14A	3/14/2018	<50	<6.0	<10.0	<10.0	<10.0	not detected	not detected
MW-14A	6/26/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-14A	9/21/2018	<26.6	<6.4	<10.6	<10.6	<10.6	not requested	not requested
MW-14A	2/20/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-15	8/16/2000	<50	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	<20	<10	<10	<10	<10	not requested	not requested
	10/22/2001	<20	<10	<10	<10	<10	not requested	not requested
	4/24/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	**551**	ANR	<10	<10	ANR	not requested	not requested
	6/16/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/14/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/21/2006	<20	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/4/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	9/14/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	12/8/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	5/23/2017	<31.2	<7.5	<12.5	<12.5	<12.5	not requested	not requested
	8/29/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<52.1	<6.3	<10.4	<10.4	<10.4	not requested	not requested
	9/19/2018	<24.8	<5.9	<9.9	<9.9	<9.9	not requested	not requested
	2/20/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-16	8/16/2000	**16**	ANR	<10	<10	<10	not requested	not requested
	3/28/2001	**27**	<10	<10	<10	<10	not requested	not requested
	10/22/2001	**56**	<10	<10	<10	<10	not requested	not requested
	4/24/2002	**38**	nt	nd	nd	nd	not requested	not requested
	10/22/2002	<20	ANR	<10	<10	ANR	not requested	not requested
	5/20/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	12/11/2003	<20	ANR	<10	<10	ANR	not requested	not requested
	5/25/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	12/14/2004	<20	ANR	<10	<10	ANR	not requested	not requested
	6/15/2005	<20	ANR	<10	<10	ANR	not requested	not requested
	12/19/2005	<20	ANR	<10	<10	ANR	not detected	not detected
	7/20/2006	**1.9 J**	ANR	<10	<10	ANR	not requested	not requested
	1/24/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/4/2007	**2 J**	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	**3 J**	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	**4 J**	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	**5.8 J**	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	**7 J**	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/20/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<51	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/19/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-17	3/28/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	10/3/2007	<20	ANR	<10	<10	ANR	not requested	not requested
	7/24/2008	<20	ANR	<10	<10	ANR	not requested	not requested
	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-17A	9/15/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-17A	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-18A	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/20/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-18B	1/8/2009	<20	ANR	<10	<10	ANR	not requested	not requested
	1/7/2010	<20	ANR	<10	<10	ANR	not requested	not requested
	6/23/2010	<50	ANR	<10	<10	ANR	not requested	not requested
	5/25/2011	<50	ANR	<10	<10	ANR	not requested	not requested
	5/16/2013	<20	ANR	<10	<10	ANR	not requested	not requested
	2/5/2016	<20	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/20/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<51	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/19/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-19	9/15/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/20/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<51	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/19/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-20	9/15/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<49	<5.9	<9.8	<9.8	<9.8	not detected	not detected
	9/19/2018	<27.2	<6.5	<10.9	<10.9	<10.9	not requested	not requested
	2/20/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-21	9/15/2016	**16.6 J/(21.5 J)**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	12/13/2016	<50	<6.0	<10.0	<10.0	<10.0	not detected	not detected
	2/22/2017	**6.5 J**	<6.0	<10.0	<10.0	<10.0	not detected	not detected
	5/23/2017	<31.2	<7.5	<12.5	<12.5	<12.5	not detected	not detected
	8/30/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<52.1	<6.3	<10.4	<10.4	<10.4	not detected	not detected
	2/21/2019	<24.8	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-22	9/15/2016	<50	<6.0	<10.0	<10.0	<10.0	not detected	not detected
	12/13/2016	**294**	<6.0	<10.0	<10.0	<10.0	not detected	**5.8 J**
*	2/21/2017	**472**	<6.0	<10.0	<10.0	<10.0	not detected	**12.0 J**
	5/23/2017	**358**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	8/30/2017	**339**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	**271**	<5.8	<9.6	<9.6	<9.6	not detected	**10.238**
	6/26/2018	**150**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/20/2018	**186**	<6.1	<10.2	<10.2	<10.2	not requested	not requested
	2/18/2019	**128**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

** = Reported pentachlorophenol biodegradation compounds

* 2,3,4,6-Tetrachlorophenol reported concentration = 5.3 J (at MW-22 on this sampling date)

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-23	9/15/2016	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	12/13/2016	<50 / (<50)	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/22/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	5/23/2017	<31.2	<7.5	<12.5	<12.5	<12.5	not requested	not requested
	8/30/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<52.1	<6.3	<10.4	<10.4	<10.4	not detected	not detected
	9/21/2018	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/18/2019	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-24	5/24/2017	<31.2	<7.5	<12.5	<12.5	<12.5	not requested	not requested
	8/30/2017	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<50	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	6/27/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/21/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	2/18/2019	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-25	11/2/2017	**151**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	**114**	<6.4	<10.6	<10.6	<10.6	not detected	not detected
	6/26/2018	**72.5**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/20/2018	**55.8**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	2/20/2019	**47.4**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-26	11/2/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<55.6	<6.7	<11.1	<11.1	<11.1	not detected	not detected
	6/27/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/20/2018	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2019	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

TABLE III-2
HISTORIC GROUNDWATER ANALYTICAL DATA SUMMARY
MARSH LUMBER COMPANY
PAMPLICO, SOUTH CAROLINA
S&ME PROJECT NO. 1584-98-146C

Sample Location	Date Collected	Method 8270 (BNA or Acid Extractable List)					Tentatively Identified Compounds	
		Pentachloro-phenol	bis(2-Ethylhexyl)-phthalate	2,4-Dichloro-phenol	2,4,6-Trichloro-phenol**	2,4,5-Trichloro-phenol	1,2,3,4-Tetrachloro-phenol	3,4,5-Trichloro-phenol
MW-27	11/2/2017	**323**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<56.8	<6.8	<11.4	<11.4	<11.4	not detected	not detected
	6/26/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/19/2018	<25.5	<6.1	<10.2	<10.2	<10.2	not requested	not requested
	2/20/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
MW-28	11/3/2017	**351**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	**262**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	6/27/2018	**128**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/20/2018	**252**	<6.4	<10.6	<10.6	<10.6	not requested	not requested
	2/21/2019	**151**	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-29	11/3/2017	**51.7**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/14/2018	<51	<6.1	<10.2	<10.2	<10.2	not detected	not detected
	9/20/2018	**41.4**	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/21/2019	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
MW-30	11/3/2017	<25	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	3/13/2018	<52.1	<6.3	<10.4	<10.4	<10.4	not detected	not detected
	6/27/2018	<24.5	<5.9	<9.8	<9.8	<9.8	not requested	not requested
	9/20/2018	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
	2/19/2019	<25.0	<6.0	<10.0	<10.0	<10.0	not requested	not requested
Corresponding MCL		1	6	NS	NS	NS	NS	NS

all concentrations reported in micrograms per liter (µg/l)

J = An estimated value less than the reporting value.'

MCL = Maximum Contaminant Levels

NS = no standard

nd = not detected

ANR = analyte not requested

25 / (25) Sample analytical result on left. Analytical result for duplicate sample on the right in parenthesis

** = Reported pentachlorophenol biodegradation compounds

155/ {241} = The number on the left is the analytical results for the sample collected following normal well purging procedures. The bracketed number on the right represents the analytical results for the sample collected with no purging prior to sample collection.

The bracketed number on the right represents the analytical results for the sample collected with no purging prior to sample collection.

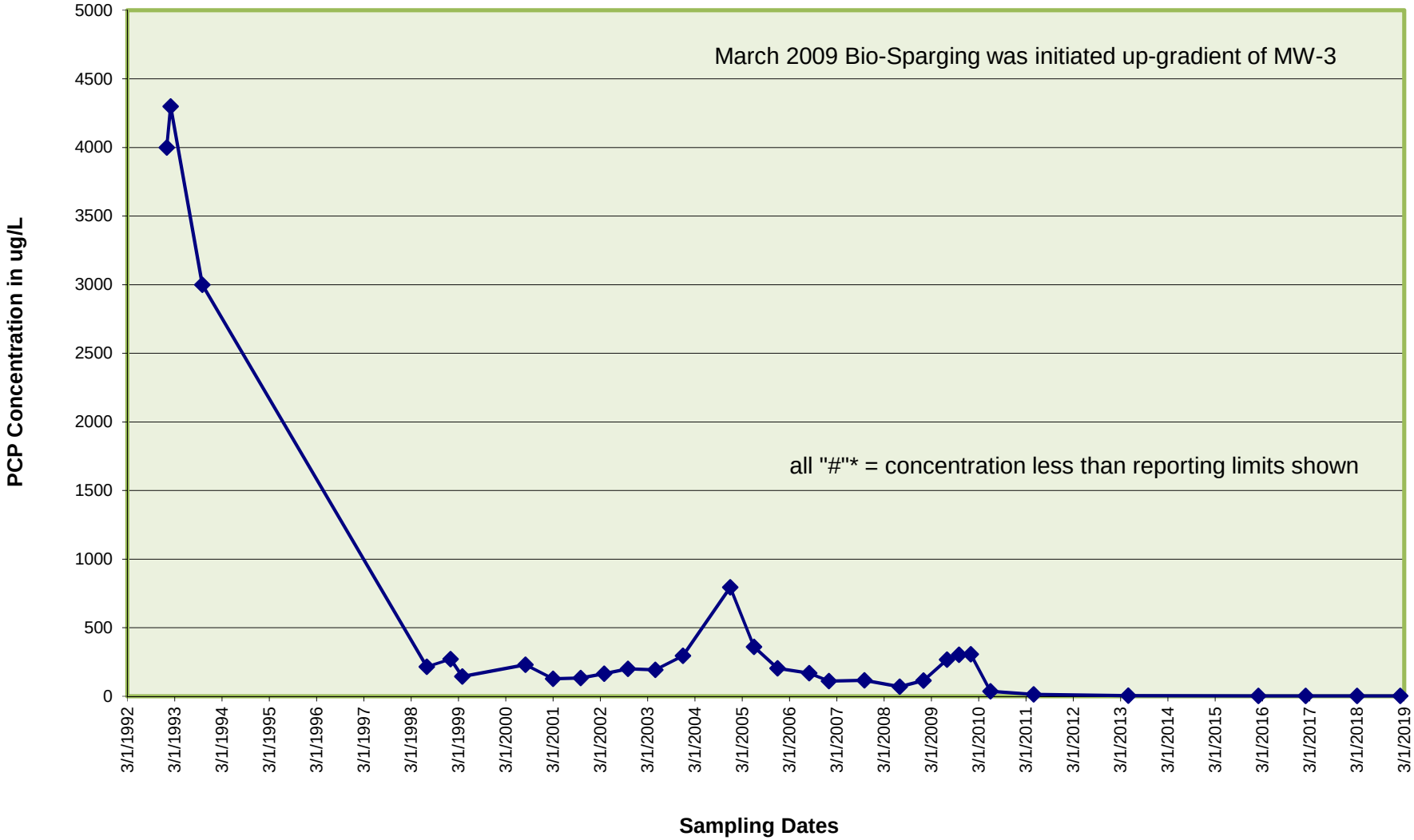
557/"576" The value on the left is for pre-acidified samples preparation used site wide. The 2nd value for the split sample result with no pre-acidification.

green shaded cells denote 1st bio-sparge pilot test time frame (2009 - 2013). Pilot test focused on area up-gradient of well MW-3A.

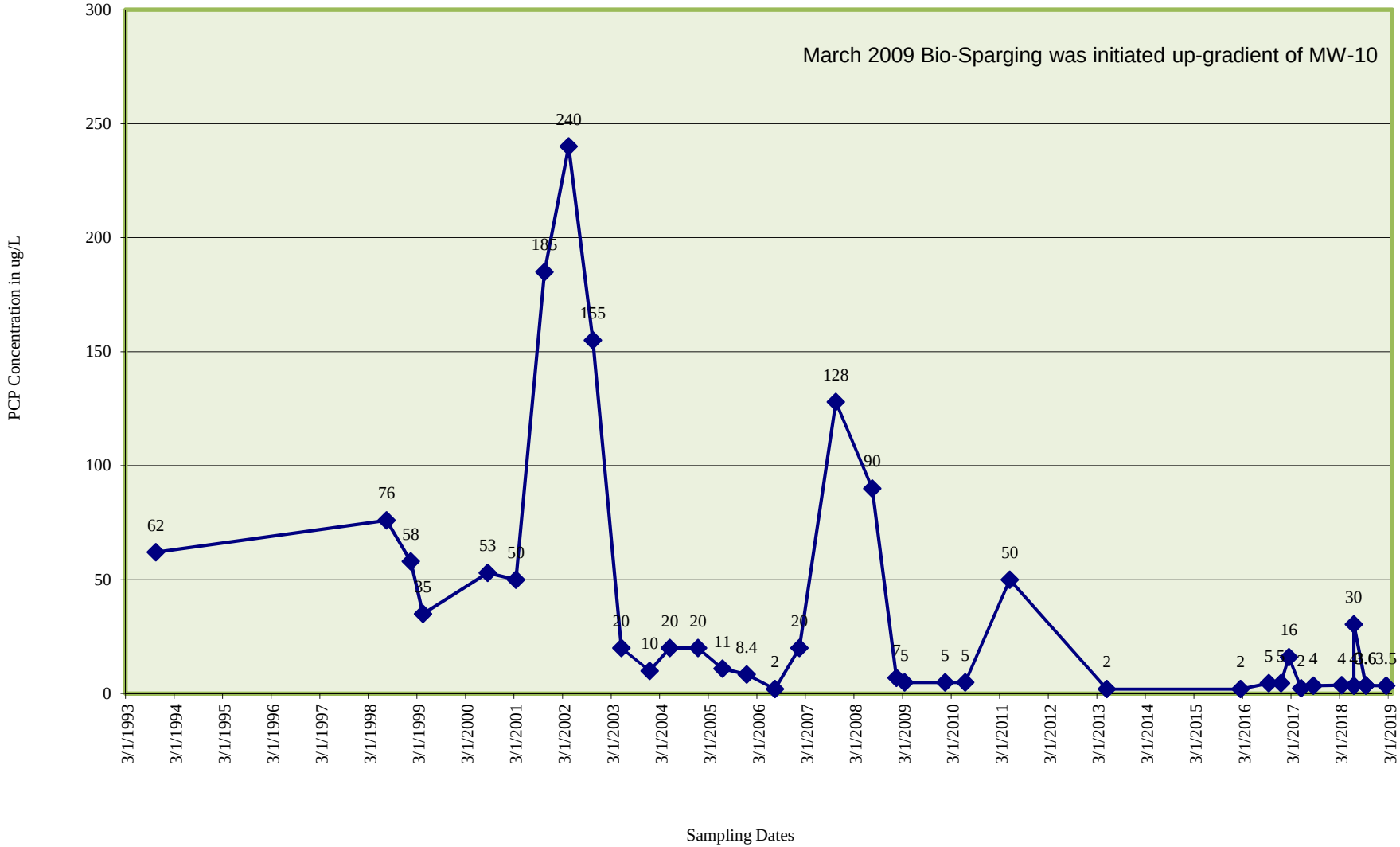
blue shaded cells denote 2nd bio-sparge pilot test time frame (2016 - 2019). Pilot test focused on the area around well MW-14A

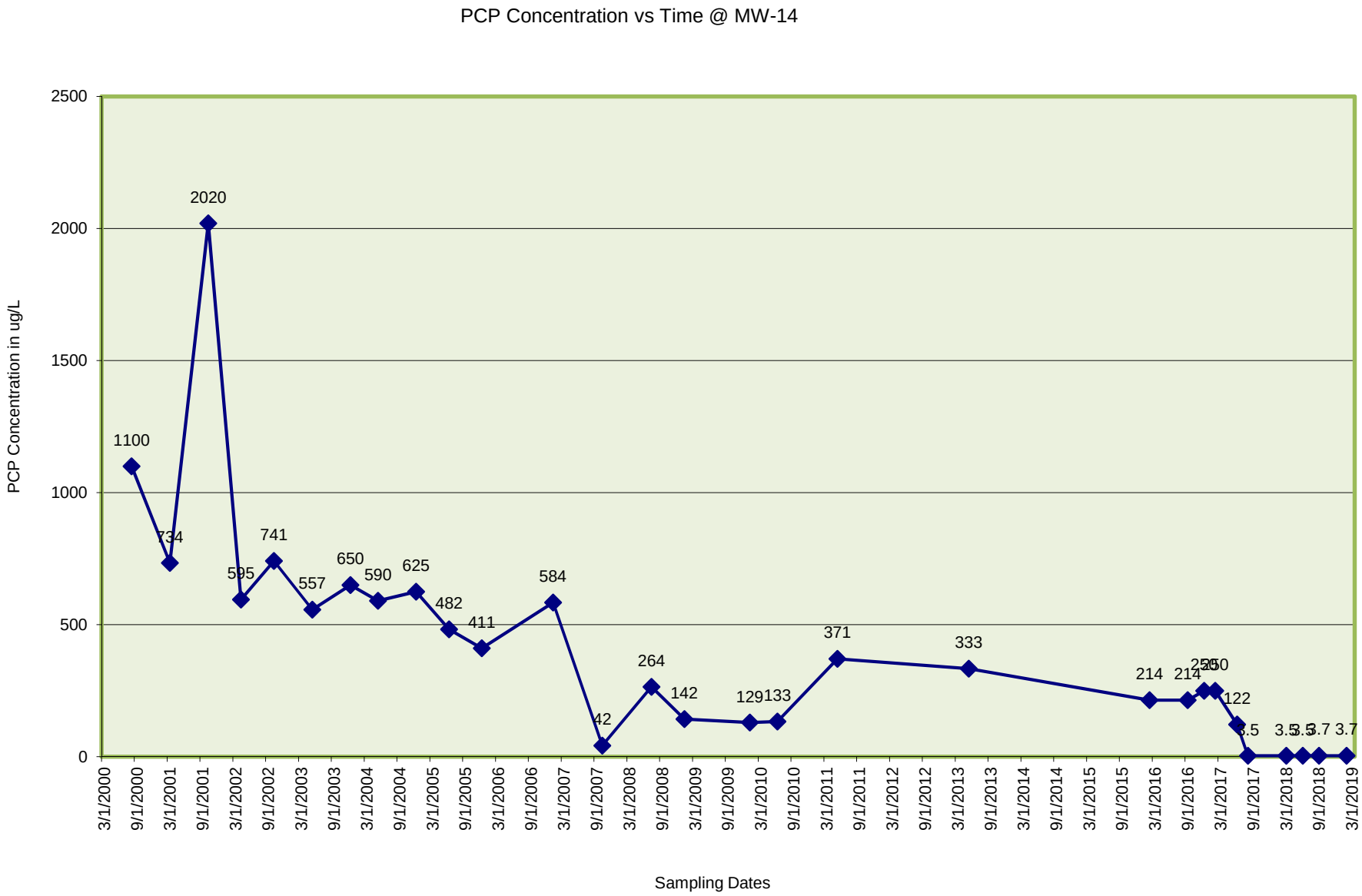
Appendix IV – Time vs Concentration Graphs

PCP Concentrations vs Time @ MW-3



PCP Concentrations vs Time @ MW-10




PCP Concentration vs Time @ MW-14
PCP Concentration in ug/L
Sampling Dates
2500
2000
1500
1000
500
0
1100
734
2020
595
741
557
650
590
625
482
411
584
42
264
142
129
133
371
333
214
214
122
3.5
3.7
3.7
3/1/2000
9/1/2000
3/1/2001
9/1/2001
3/1/2002
9/1/2002
3/1/2003
9/1/2003
3/1/2004
9/1/2004
3/1/2005
9/1/2005
3/1/2006
9/1/2006
3/1/2007
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3/1/2011
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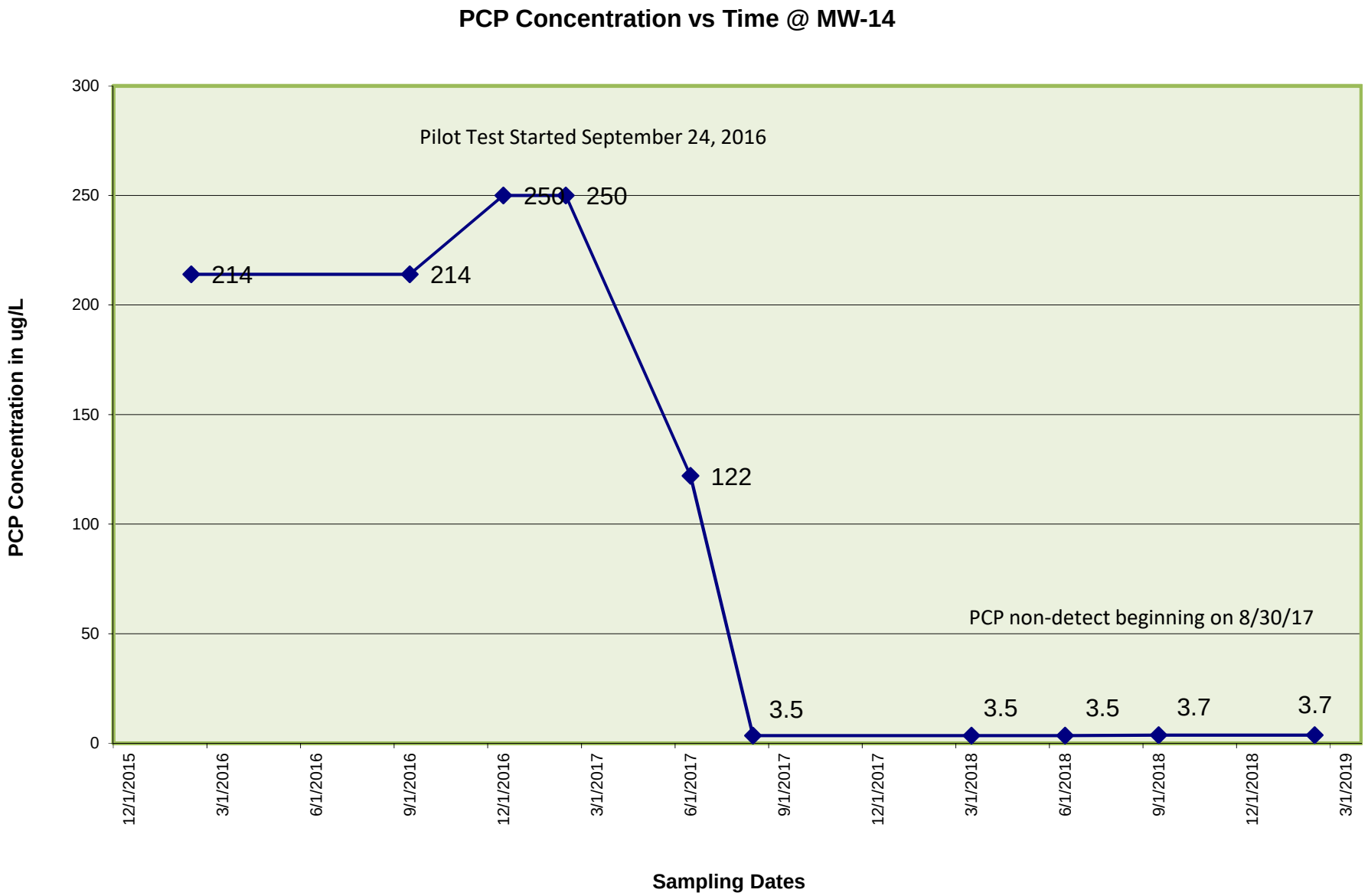
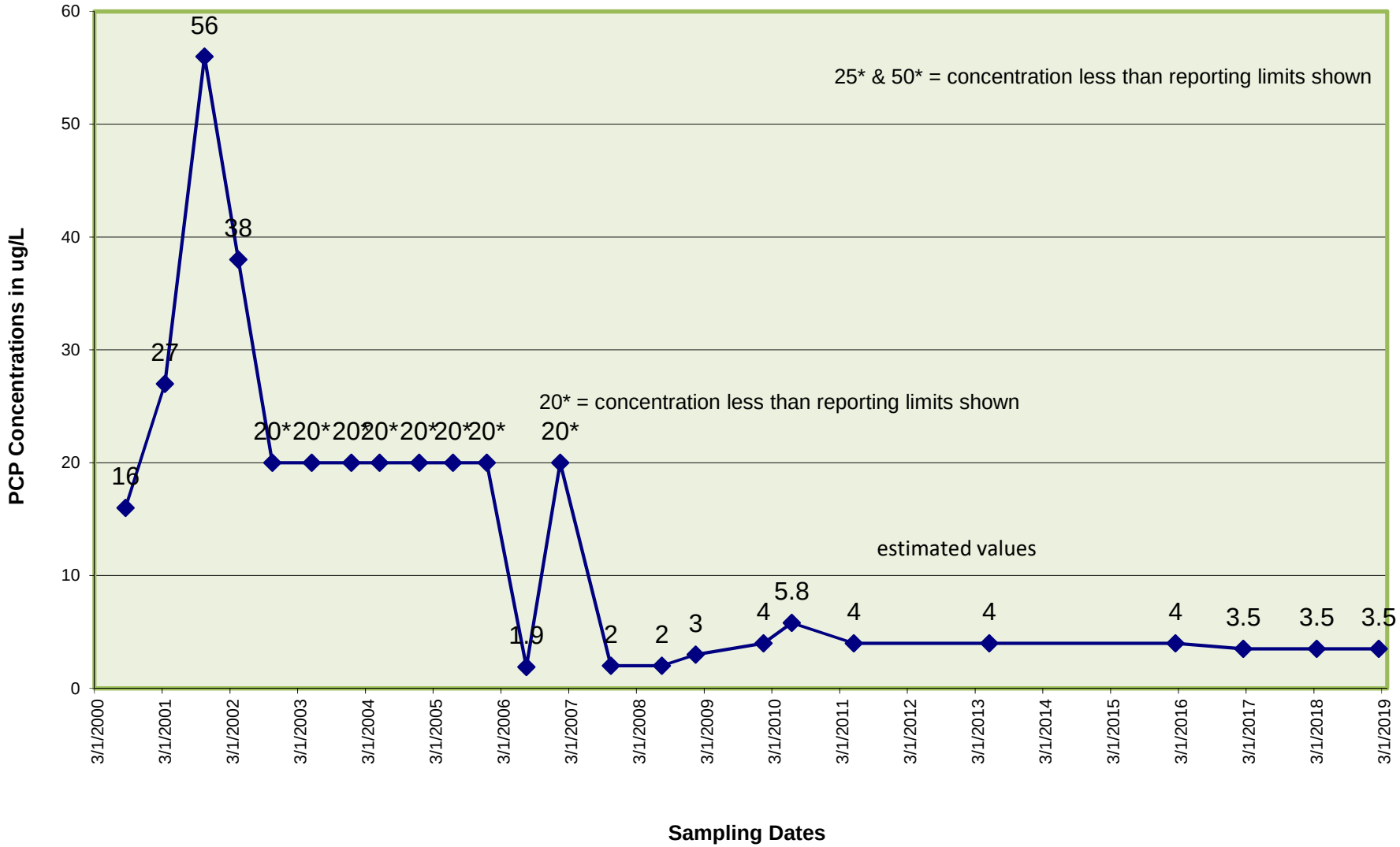
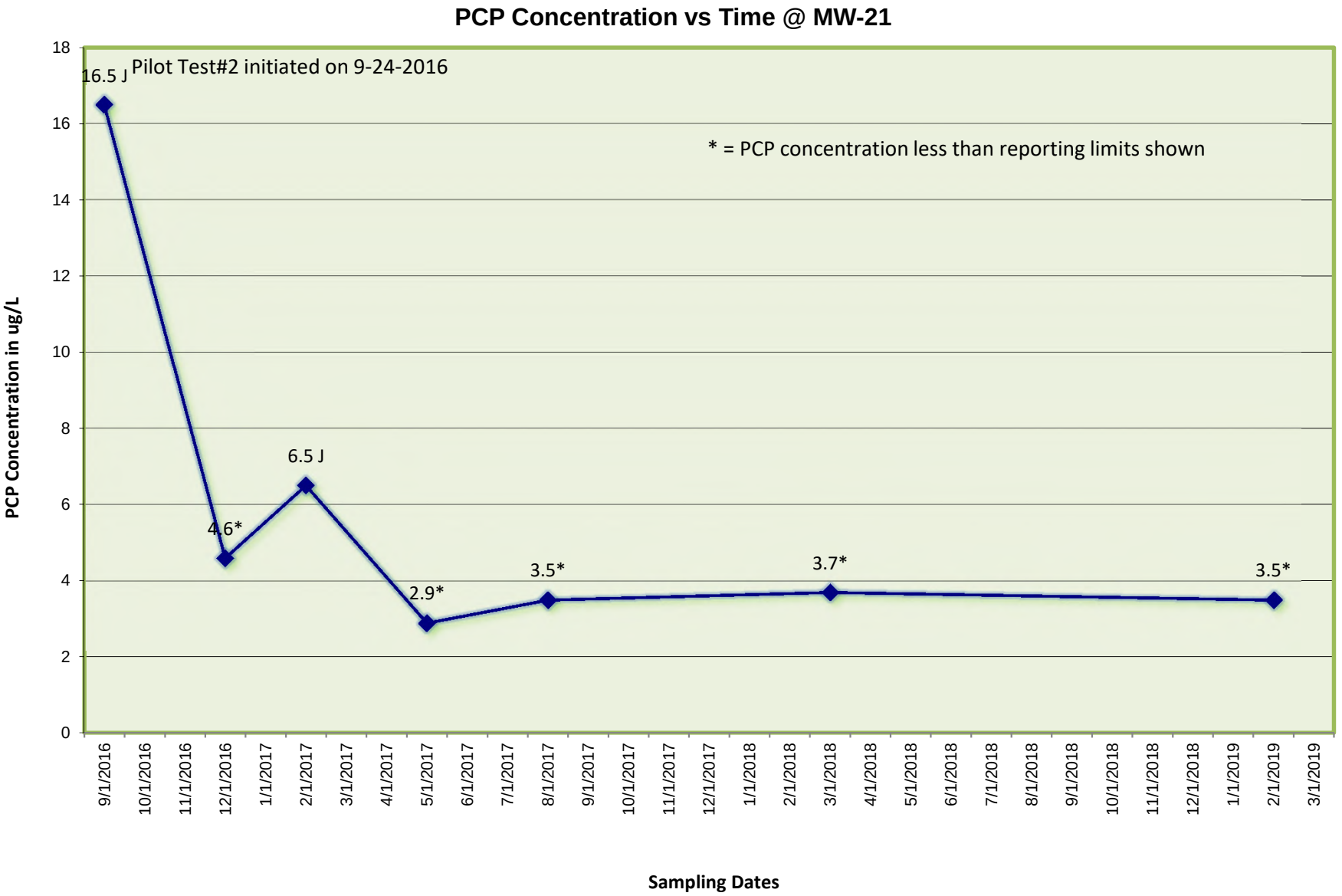
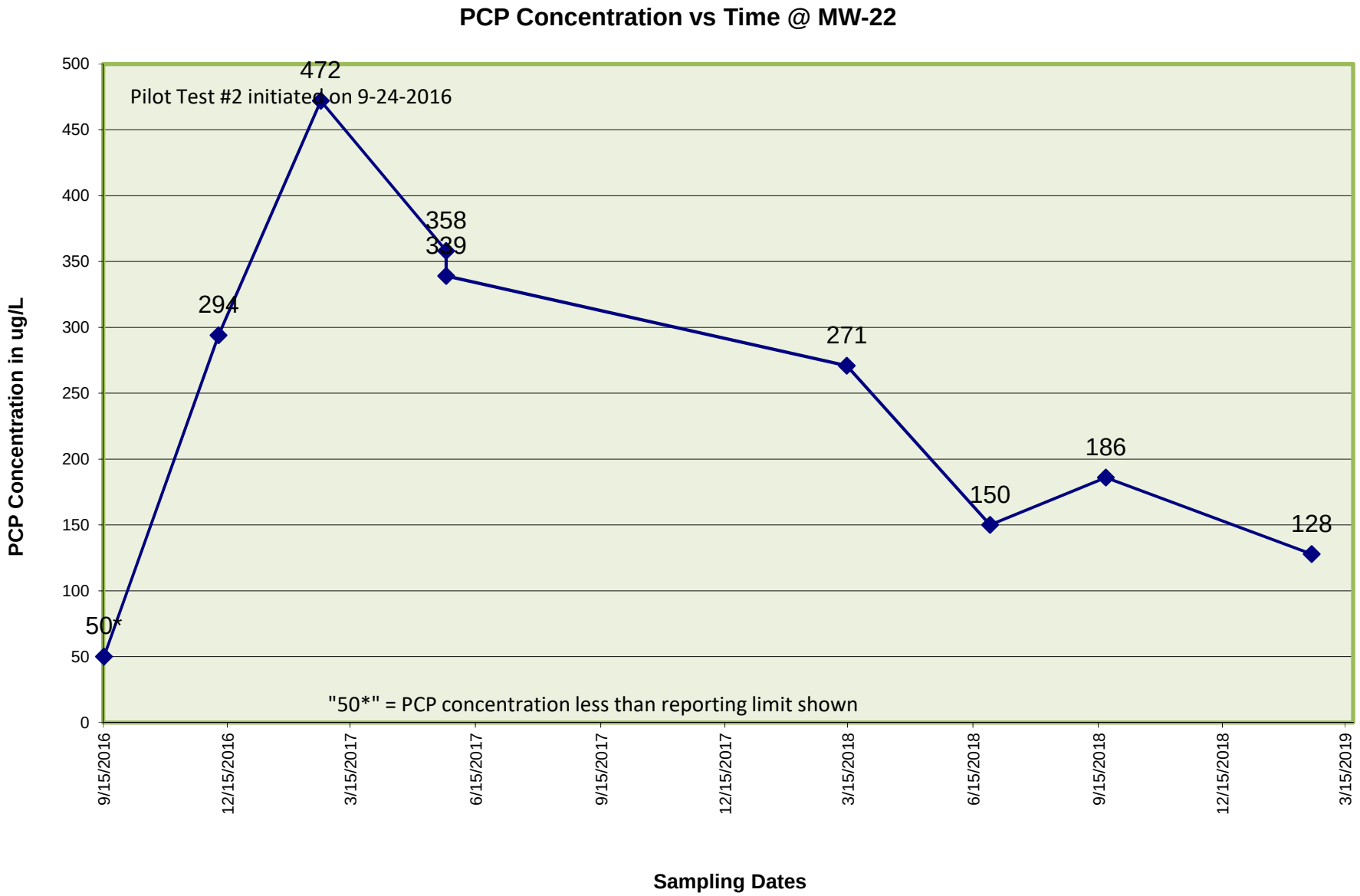
3/1/2012
9/1/2012
3/1/2013
9/1/2013
3/1/2014
9/1/2014
3/1/2015
9/1/2015
3/1/2016
9/1/2016
3/1/2017
9/1/2017
3/1/2018
9/1/2018
3/1/2019

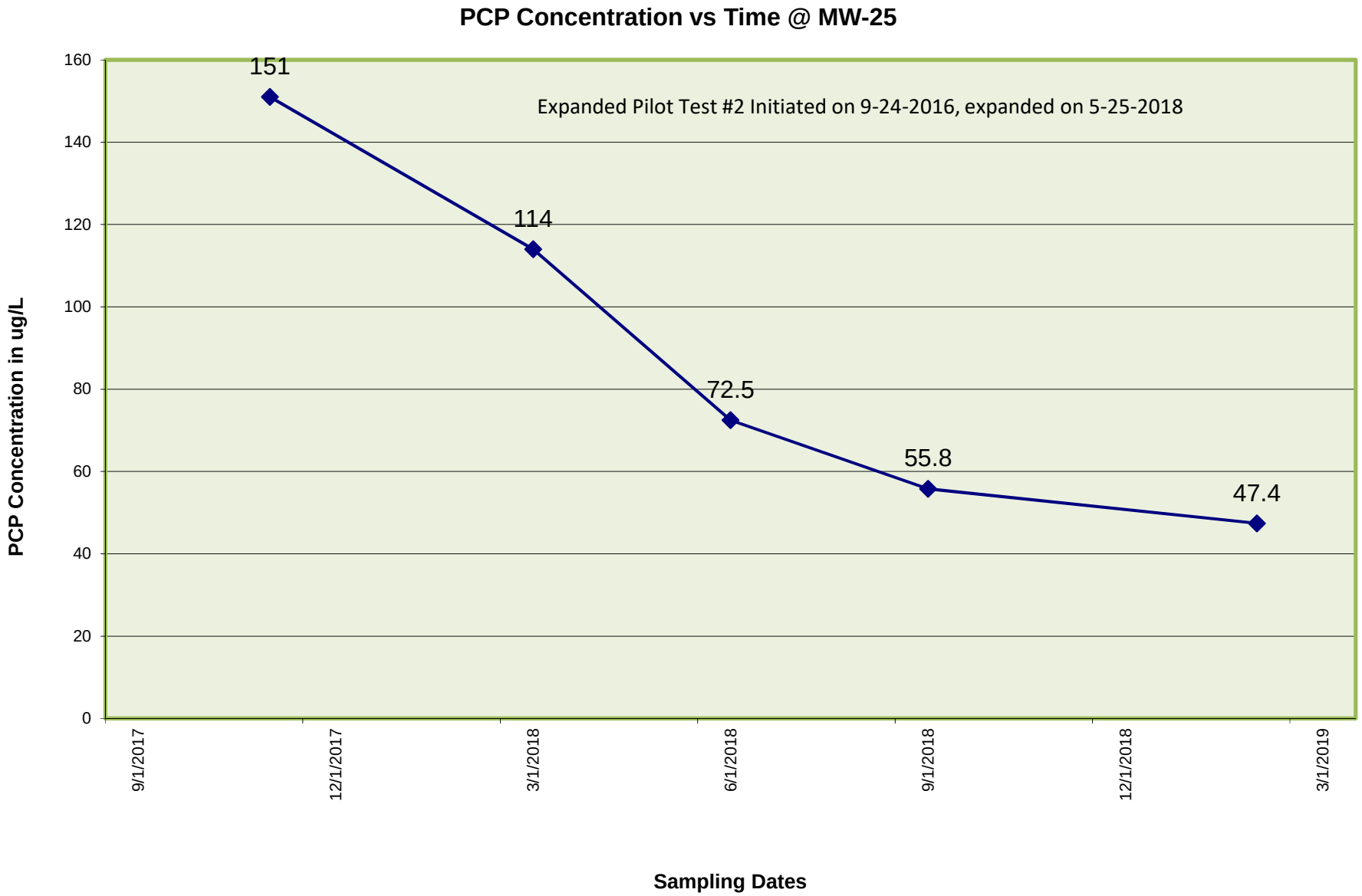

PCP Concentration vs Time @ MW-14
PCP Concentration in ug/L
300
250
200
150
100
50
0
Pilot Test Started September 24, 2016
214
214
250
250
122
3.5
3.5
3.5
3.7
3.7
PCP non-detect beginning on 8/30/17
12/1/2015
3/1/2016
6/1/2016
9/1/2016
12/1/2016
3/1/2017
6/1/2017
9/1/2017
12/1/2017
3/1/2018
6/1/2018
9/1/2018
12/1/2018
3/1/2019
Sampling Dates

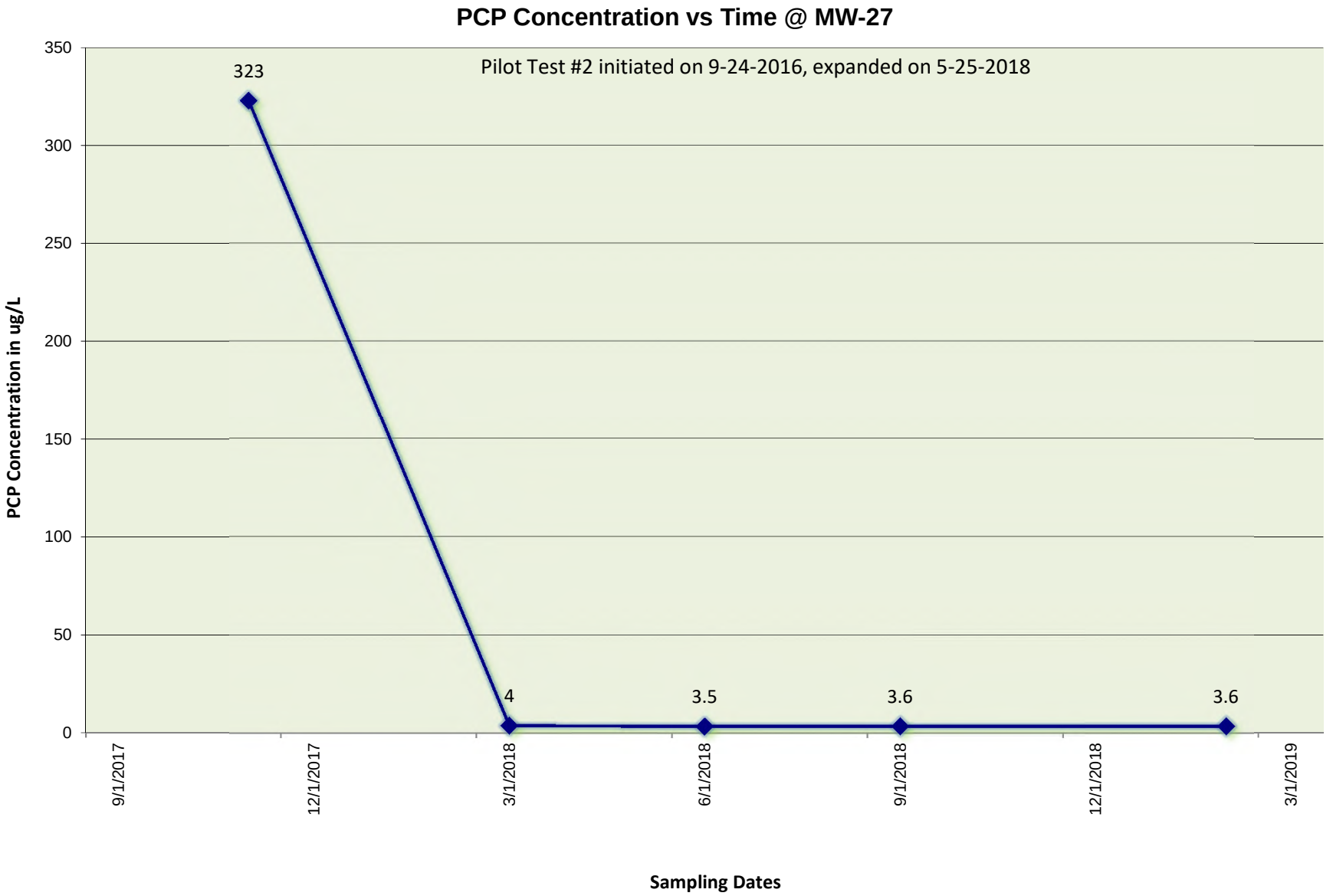
PCP Concentrations vs Time @ MW-16

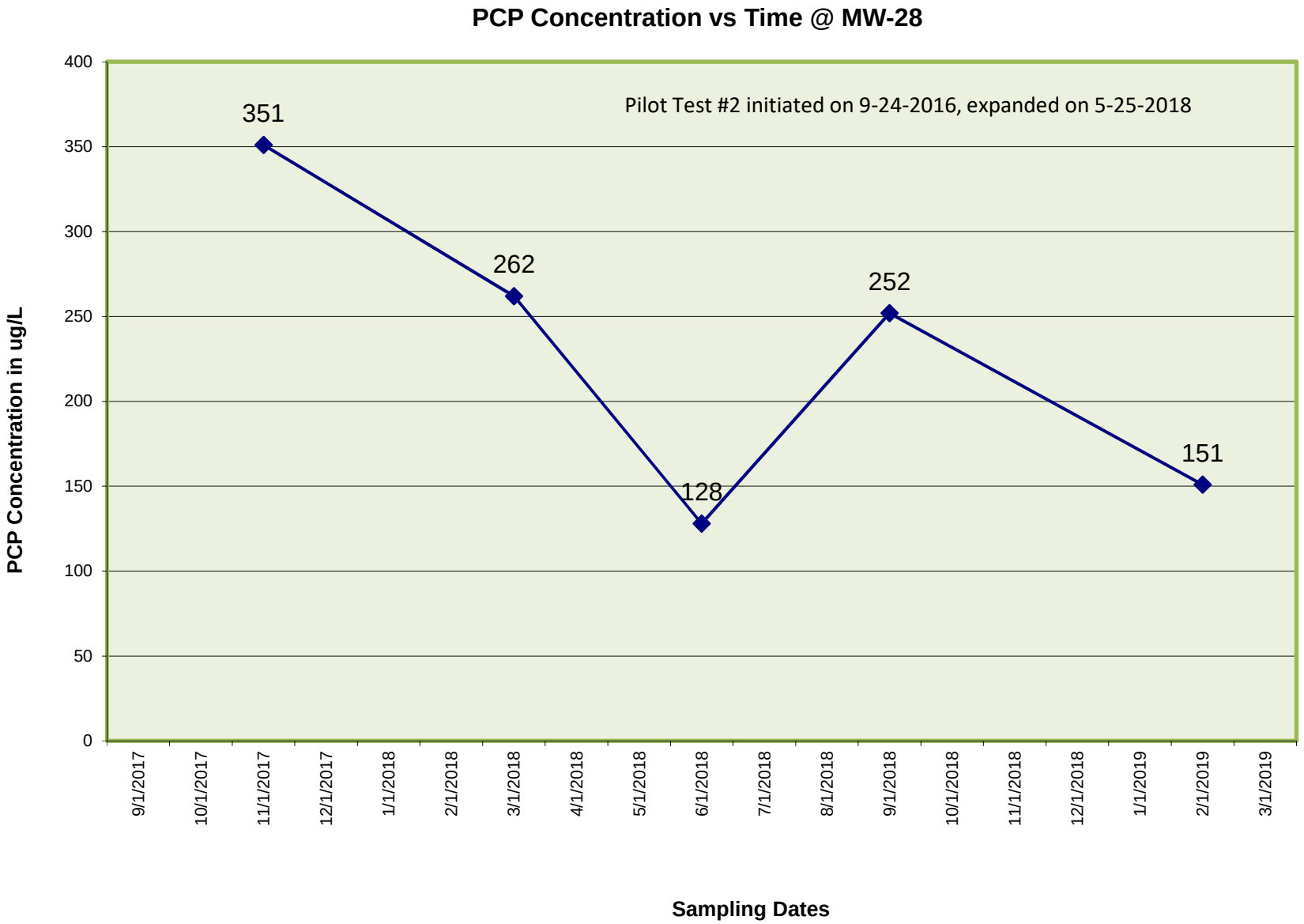


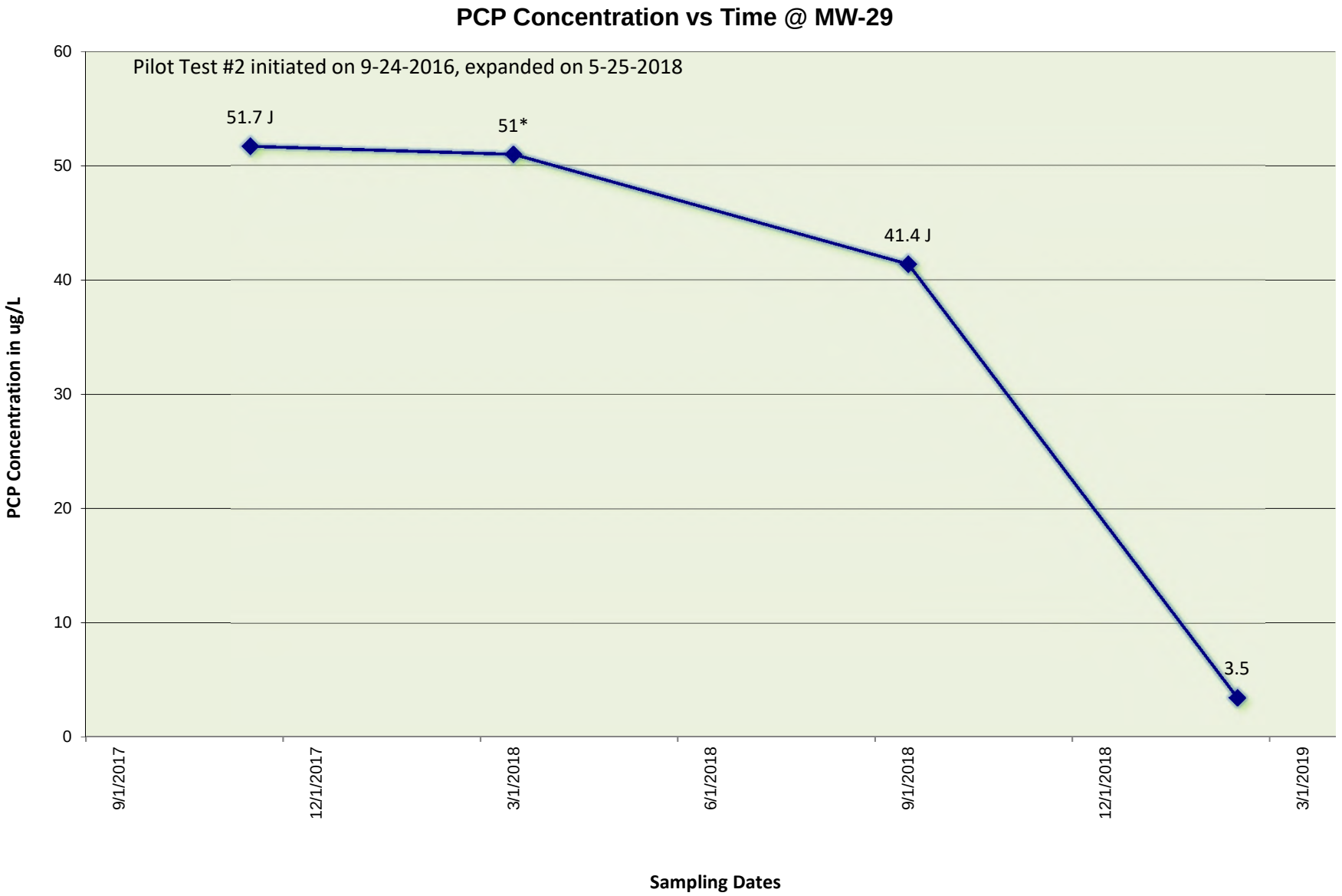

PCP Concentration vs Time @ MW-21
Pilot Test#2 initiated on 9-24-2016
* = PCP concentration less than reporting limits shown
16.5 J
4.6*
6.5 J
2.9*
3.5*
3.7*
3.5*
PCP Concentration in ug/L
0
2
4
6
8
10
12
14
16
18
9/1/2016
10/1/2016
11/1/2016
12/1/2016
1/1/2017
2/1/2017
3/1/2017
4/1/2017
5/1/2017
6/1/2017
7/1/2017
8/1/2017
9/1/2017
10/1/2017
11/1/2017
12/1/2017
1/1/2018
2/1/2018
3/1/2018
4/1/2018
5/1/2018
6/1/2018
7/1/2018
8/1/2018
9/1/2018
10/1/2018
11/1/2018
12/1/2018
1/1/2019
2/1/2019
3/1/2019
Sampling Dates


PCP Concentration vs Time @ MW-22
PCP Concentration in ug/L
Sampling Dates
Pilot Test #2 initiated on 9-24-2016
"50*" = PCP concentration less than reporting limit shown
50*
294
472
358
339
271
150
186
128
500
450
400
350
300
250
200
150
100
50
0
9/15/2016
12/15/2016
3/15/2017
6/15/2017
9/15/2017
12/15/2017
3/15/2018
6/15/2018
9/15/2018
12/15/2018
3/15/2019


PCP Concentration vs Time @ MW-25
Expanded Pilot Test #2 Initiated on 9-24-2016, expanded on 5-25-2018
151
114
72.5
55.8
47.4
PCP Concentration in ug/L
160
140
120
100
80
60
40
20
0
9/1/2017
12/1/2017
3/1/2018
6/1/2018
9/1/2018
12/1/2018
3/1/2019
Sampling Dates


PCP Concentration vs Time @ MW-27
Pilot Test #2 initiated on 9-24-2016, expanded on 5-25-2018
PCP Concentration in ug/L
350
300
250
200
150
100
50
0
323
4
3.5
3.6
3.6
9/1/2017
12/1/2017
3/1/2018
6/1/2018
9/1/2018
12/1/2018
3/1/2019
Sampling Dates


PCP Concentration vs Time @ MW-28
Pilot Test #2 initiated on 9-24-2016, expanded on 5-25-2018
PCP Concentration in ug/L
400
350
300
250
200
150
100
50
0
351
262
128
252
151
9/1/2017
10/1/2017
11/1/2017
12/1/2017
1/1/2018
2/1/2018
3/1/2018
4/1/2018
5/1/2018
6/1/2018
7/1/2018
8/1/2018
9/1/2018
10/1/2018
11/1/2018
12/1/2018
1/1/2019
2/1/2019
3/1/2019
Sampling Dates


PCP Concentration vs Time @ MW-29
Pilot Test #2 initiated on 9-24-2016, expanded on 5-25-2018
51.7 J
51*
41.4 J
3.5
PCP Concentration in ug/L
60
50
40
30
20
10
0
9/1/2017
12/1/2017
3/1/2018
6/1/2018
9/1/2018
12/1/2018
3/1/2019
Sampling Dates