

# GENERAL ENGINEERING AND ENVIRONMENTAL OF NC, INC.

*Meeting Today's Needs with a Vision for Tomorrow*

December 22, 2005

Mr. Cyrus F. Parker, L.G.  
Project Manager  
NCDOT Geotechnical Engineering Unit-GeoEnvironmental Section  
1589 Mail Service Center  
Raleigh, North Carolina 27699-1589

Re: State Project P-3800, WBS Element 32179 Preliminary Site Assessment at Eleven Properties at Charlotte Multi-Modal Rail Station Property (Parcels 1a, 1b, 1c, 1d, 2a, 2b, 2c, 11, 12, 13, 24a)

Dear Cyrus:

In accordance with our notice to proceed issued September 27, 2005 and the supplemental notice to proceed issued in October 24, 2005, General Engineering and Environmental of NC, Inc. (General Engineering) has completed preliminary site assessments at the above referenced sites. The assessments included geophysical investigations as well as soil and groundwater sampling.

Please find enclosed, four copies of each of four preliminary site assessment reports. The sites were assessed in four separate sub-groups based on the fact that many of the sites were contiguous to others and as such there are four separate reports (one for each sub-group). The four separate reports address the sites as follows:

- Sites 1a, 1b, 1c, 1d are addressed in one report.
- Sites 2a, 2b, 2c are addressed in one report.
- Sites 11, 12, 13 are addressed in one report.
- ▪ Site 24a is addressed in one report.

Mr. Cyrus F. Parker  
December 22, 2005  
Page 2

General Engineering appreciates the opportunity to be of service to NCDOT and we look forward to working with you on future assignments. If you have any questions concerning these reports or need additional information, please call me at (919) 544-1100.

Yours very truly,

General Engineering and Environmental of NC, Inc.  
*an Affiliate of The GEL Group, Inc.*



Robert M. Miller, P.E.  
RTP Office Manager

**GEOPHYSICAL SURVEY AND  
PRELIMINARY SITE ASSESSMENT REPORT**

**Multi-Modal Rail Station  
Site 24a  
(Mecklenburg County Parcel  
ID No. 078-067-01)  
Charlotte, North Carolina  
WBS Element # 32179  
Mecklenburg County**

Submitted to:

**North Carolina Dept. of Transportation  
Geotechnical Engineering Unit  
1589 Mail Service Center  
Raleigh, North Carolina 27699-1589**

Submitted by:

**General Engineering and Environmental of NC, Inc.  
*an Affiliate of The GEL Group, Inc.*  
Post Office Box 14262  
Research Triangle Park, North Carolina 27709**

**Submittal Date: December 22, 2005**

# **GEOPHYSICAL SURVEY AND PRELIMINARY SITE ASSESSMENT REPORT**

**Multi-Modal Rail Station  
Site 24a  
(Mecklenburg County Parcel  
ID No. 078-067-01)  
Charlotte, North Carolina  
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## **TABLE OF CONTENTS**

<u>Section</u>	<u>Subject</u>	<u>Page</u>
	Signature Page .....	ii
	Executive Summary.....	iii
1.0	Introduction.....	1
2.0	Background.....	1
3.0	Local Geology and Hydrogeology.....	2
4.0	Subsurface Investigation.....	3
	4.1 Geophysical Evaluation .....	3
	4.1.1 Ground Penetrating Radar Methodology .....	3
	4.1.2 Radio Frequency Electromagnetic Methodology .....	4
	4.1.3 Time Domain Electromagnetic Methodology .....	5
	4.1.4 Terrain Conductivity Methodology.....	6
	4.1.5 Field Procedures .....	6
	4.2 Subsurface Soil Investigation .....	7
	4.3 Groundwater Investigation.....	9
5.0	Conclusions and Recommendations .....	10
<u>Tables</u>		
1	Summary of Detected Constituents of Concern in Soil	
2	Summary of Detected Constituents of Concern in Temporary Groundwater Well SB-50-GW	
<u>Figures</u>		
1	Site Location Map	
2	Subject Site and Surrounding Properties	
3	Site Map showing DPT Sample Locations	
<u>Appendix</u>		
I	Soil Boring Logs	
II	Soil and Groundwater Certificates of Analysis and Chain of Custody	

## Signature Page

This document, entitled "Geophysical Survey and Preliminary Site Assessment Report," has been prepared for the Multi-Modal Rail Station, Site 24a, located north of North Smith Street between West 6<sup>th</sup> Street and Hearn Place in Charlotte, North Carolina. It has been prepared by General Engineering and Environmental of North Carolina, Inc. in accordance with the Notice to Proceed provided by the North Carolina Department of Transportation-GeoEnvironmental Section, Geotechnical Engineering Unit for the exclusive use of the North Carolina Department of Transportation. It has been prepared in accordance with accepted quality control practices and has been reviewed by the undersigned.

GENERAL ENGINEERING AND  
ENVIRONMENTAL OF NC INC.  
*an Affiliate of The GEL Group, Inc.*



Lori K. Hamburg  
Environmental Scientist II

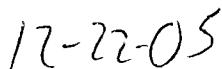


Andrew D. Eyer, L.G.  
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North Carolina License Number 17147





12-22-05  
Date

# **GEOPHYSICAL SURVEY AND PRELIMINARY SITE ASSESSMENT REPORT**

**Multi-Modal Rail Station  
Site 24a  
(Mecklenburg County Parcel  
ID No. 078-067-01)  
Charlotte, North Carolina  
WBS Element # 32179  
Mecklenburg County**

## **Executive Summary**

The subject site is located north of North Smith Street between the intersection of West 6<sup>th</sup> Street and Hearn Place in Charlotte, North Carolina. The primary purpose of this investigation was to determine the presence or absence of petroleum hydrocarbon or other impact to soil and/or groundwater as a result of previous operations at the site.

Currently, the subject site is a vacant lot. According to a Phase I Environmental Site Assessment (ESA) performed for the North Carolina Department of Transportation (NCDOT) by Arcadis in 2000, the subject site was previously owned by Carolina Rim & Wheel Company and was used as a parking lot. A review of Sanborn maps performed as a part of the Phase I ESA by Arcadis identifies that in years past this site housed a coal storage yard and a one-story building as early as 1929.

To determine the presence or absence of impact to subsurface soil by constituents of concern at the subject site, General Engineering and Environmental of NC, Inc. (General Engineering) performed a geophysical evaluation and a preliminary site assessment that included the collection and analysis of soil and groundwater samples. Underground utilities, metallic anomalies not suspected to be associated with underground storage tanks (USTs) and metallic anomalies potentially associated with USTs were identified during the geophysical survey.

Results of analysis of soil samples are not considered indicative of significant impact. Lead and total chromium compounds detected in the subsurface soil are most likely naturally occurring within the soil and the concentrations detected are likely representative of typical background concentrations in this area; however, additional background samples would need to be collected for further confirmation.

The analytical results for groundwater from temporary groundwater monitoring well SB-50-GW are indicative of groundwater impact. Constituents of concern were detected at concentrations exceeding the North Carolina Department of Environment and Natural Resources (NCDENR) 15A NCAC 2L .0115 Groundwater Quality Standards

(GWQS) in the groundwater sample collected from the temporary groundwater monitoring well. With only one temporary groundwater monitoring well location, it is not possible to accurately estimate the extent of groundwater impact.

The water table at the subject site was encountered at a depth of approximately 5.6 feet bls. Therefore, groundwater would possibly be encountered during construction within the subject site.

Further groundwater and/or soil investigation is recommended to determine the extent and severity of soil and groundwater impact underlying the subject site. It is recommended that the NCDOT notify NCDENR of the soil and groundwater impact identified during this investigation.

# **GEOPHYSICAL SURVEY AND PRELIMINARY SITE ASSESSMENT REPORT**

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Charlotte, North Carolina  
WBS Element # 32179  
Mecklenburg County**

## **1.0 Introduction**

This document presents the details of a geophysical survey and preliminary site assessment performed at the above referenced property (the subject site). The subject site (Site 24a) is located north of North Smith Street between West 6<sup>th</sup> Street and Hearn Place in Charlotte, North Carolina. The site location is shown on Figure 1, an excerpt from the United States Geological Survey (USGS) 7.5-minute quadrangle map of Charlotte East, North Carolina. This survey and assessment were conducted by General Engineering and Environmental of NC, Inc. (General Engineering) in accordance with the Notice to Proceed issued by the North Carolina Department of Transportation (NCDOT).

The primary purpose of this investigation was to determine the presence or absence of impact to the subject site soil and/or groundwater from constituents of concern as a result of previous operations at the site.

## **2.0 Background**

The subject site is one of several properties that NCDOT owns that are associated with the future construction of the Charlotte Multi-Modal Rail Station. NCDOT wanted to assess the property to determine the presence or absence of soil and/or groundwater impact from constituents of concern related to the previous operations on site.

This site is part of a series of eleven sites that were assessed by General Engineering. The remaining eight properties are discussed in other separate reports submitted to the NCDOT. The subject site is bounded to the north by active rail tracks, to the south by North Smith Street, to the east by Hearn Place and to the west by West 6<sup>th</sup> Street. Figure 2 shows the general site layout. Currently, the subject site includes vacant land with relict structures observed related to previous uses of the properties (portions of foundation walls, etc.). The property is currently owned by NCDOT. No authorized activity currently takes place on this site.

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### 3.0 Local Geology and Hydrogeology

The site is located in Mecklenburg County, North Carolina, in the Charlotte Belt of the Piedmont Physiographic Province. The Charlotte Belt is predominately underlain by dense granitic bedrock that yields groundwater primarily from secondary porosity and permeability provided by fractures. The bedrock is covered by regolith consisting of saprolite, alluvium, and soil. The Charlotte Belt in the vicinity of the subject site is typically characterized by low, rounded hills and shallow valley topography underlain by metamorphic and igneous rocks of Paleozoic and Precambrian age.

The subject site is located within the Piedmont aquifer system, which consists mostly of crystalline-rock aquifers. The rocks that make up the crystalline-rock aquifers are crystalline metamorphic and igneous rocks. Regolith typically overlies the aquifers. The regolith and fractures in the bedrock serve as the principal places for the storage and transmission of groundwater, and groundwater movement is generally along short flow paths to the nearest stream.

The soils encountered in the vicinity of this site during the preliminary site assessment consist predominately of brown/orange/grey silty, sandy clay and sandy, clayey silt. In its September 2000 Phase I Environment Site Assessment report for the study area, Arcadis indicated that the Soil Conservation Service Soil Survey for Mecklenburg County typified soils in the study area as "urban land," having more than 85% impervious surfaces, and with underlying soils in which the natural characteristics have mostly been altered or destroyed. Based on the results of groundwater sampling conducted as part of the preliminary site assessment, the water table in the vicinity of the subject site is encountered at depths ranging from approximately 5 to 22 feet below land surface (bls).

According to the contour lines on the topographic map in Figure 1, the study area is located approximately 750 feet above mean sea level (MSL).

The nearest perennial surface water body to the subject site is Irwin Creek, which is located approximately 2,500 feet west of the site. Based on the United States Geological Survey topographic map, the groundwater flow direction underlying the subject site is most likely westerly.

## **4.0 Subsurface Investigation**

To determine the presence or absence of impact to subsurface soil and groundwater by constituents of concern at the site, General Engineering performed a limited site assessment that consisted of the following tasks:

- Performance of a geophysical evaluation to identify the presence or absence of USTs and associated appurtenances, and other underground anomalies including utilities, at the subject site and their locations.
- Collection and soil vapor screening of soil samples from subsurface soil borings to determine the presence or absence of soil impact from constituents of concern.
- Additionally, a groundwater sample was collected from a temporary groundwater monitoring well for analysis of constituents of concern.

The details of these tasks are discussed in the following sections.

### **4.1 Geophysical Evaluation**

The geophysical evaluation included the deployment of ground penetrating radar technology, radio frequency electromagnetic technology, and time domain electromagnetic technology to the site. These technologies were used in concert with one another in order to identify subsurface metallic anomalies and, in particular, to identify the presence of USTs on site. A brief description of each technology is presented in the following paragraphs followed by a discussion of the results of the geophysical evaluation.

#### **4.1.1 Ground Penetrating Radar Methodology**

A RAMAC digital radar control system configured with a 250 Megahertz (MHz) antenna array was used in this investigation. Ground Penetrating Radar (GPR) is an electromagnetic geophysical method that detects interfaces between subsurface materials with differing dielectric constants. The GPR system consists of an antenna that houses the transmitter and receiver, a digital control unit that both generates and digitally records the GPR data, and a color video monitor to view data as they are collected in the field.

The transmitter radiates repetitive short-duration electromagnetic waves (at radar frequencies) into the earth from an antenna moving across the ground surface. These radar waves are reflected back to the receiver from the interface of materials with

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different dielectric constants. The intensity of the reflected signal is a function of the contrast in the dielectric constant between the materials, the conductivity of the material through which the wave is traveling, and the frequency of the signal. Subsurface features that commonly cause such reflections are: 1) natural geologic conditions, such as changes in sediment composition, bedding, and cementation horizons and voids; or 2) unnatural changes to the subsurface, such as disturbed soils, soil backfill, buried debris, tanks, pipelines, and utilities. The digital control unit processes the signal from the receiver and produces a continuous cross-section of the subsurface interface reflection events.

GPR data profiles are collected along transects, which are measured paths along which the GPR antenna is moved. During a survey, marks are placed in the data by the operator at designated points along the GPR transects or with a survey wheel odometer. These marks allow for a correlation between the GPR data and the position of the GPR antenna on the ground.

Depth of investigation of the GPR signal is highly site-specific and is limited by signal attenuation (absorption) in the subsurface materials. Signal attenuation is dependent on the electrical conductivity of the subsurface materials. Signal attenuation is greatest in materials with relatively high electrical conductivities, such as clays, brackish groundwater, or groundwater with a high dissolved solid content from natural or man-made sources. Signal attenuation is lowest in relatively low-conductivity materials, such as dry sand or rock. Depth of investigation is also dependent on the antenna's transmitting frequency. Depth of investigation generally increases as transmitting frequency decreases; however, the ability to resolve smaller subsurface features is diminished as frequency is decreased.

The GPR antenna used at this site is internally shielded from aboveground interference sources. Accordingly, the GPR response is not affected by overhead power lines, metallic buildings, or nearby objects.

#### **4.1.2 Radio Frequency Electromagnetic Methodology**

A Radio Detection RD4000PXL2 unit was used in this investigation. Radio Frequency Electromagnetic (EM) utility locating equipment consists of a transmitter and a dual-function receiver. The receiver can be operated in a "passive" mode or in an "active" mode. The two modes of operation provide various levels of detection capabilities depending on the specific target or application.

The system is operated in the "active" mode by either inducing or conducting a signal into the underground utility to be traced. A transmitter is placed over and in line

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with a suspected buried utility. The transmitter induces a signal that propagates along the buried utility. As the receiver is moved back and forth across the suspected path of the utility, the trace signal induces a signal into the receivers coil sensor. A visual and audio response indicates when the receiver is directly over the buried utility. Another means of detecting in the “active” mode utilizes a method to “conduct” a signal within the buried utility. To accomplish this, a cable from the transmitter is clamped onto an exposed section of the buried utility and a signal propagates along the buried line. This technique minimizes any interference caused by parasitic emissions from adjacent cables in congested areas. When the system is utilized in the “passive” mode, the receiver is responding to a 60-Hertz cycle current energized by underground utilities.

Interference can and may occur when buried utilities intersect or are adjacent to each other. This effect, referred to as “bleed-off,” may provide a false response to the identification of the tracked utility. “Bleed-off” is caused by utilities that may be energized in the “active” or “passive” mode.

#### **4.1.3 Time Domain Electromagnetic Methodology**

The Time Domain Electromagnetic (TDEM) methods measure the electrical conductivity of subsurface materials. The conductivity is determined by inducing (from a transmitter) a time or frequency-varying magnetic field and measuring (with a receiver) the amplitude and phase shift of an induced secondary magnetic field. The secondary magnetic field is created by subsurface conductive materials behaving as an inductor as the primary magnetic field is passed through them.

The Geonics EM-61 system used in this investigation operates within these principles. However, the EM-61 TDEM system can discriminate between moderately conductive earth materials and very conductive metallic targets. The EM-61 consists of a portable coincident loop time domain transmitter and receiver with a 0.5-meter by 1.0-meter coil system. The EM-61 generates 150 pulses per second and measures the response from the ground after transmission or between pulses. The secondary EM responses from metallic targets are of longer duration than those created by conductive earth materials. By recording the later time EM arrivals, only the response from metallic targets is measured, rather than the field generated by the earth material.

#### **4.1.4 Terrain Conductivity Methodology**

Terrain Conductivity also measures the electrical conductivity of subsurface materials. The conductivity is determined by inducing a frequency-varying magnetic field and measuring the amplitude and phase shift of an induced secondary magnetic field. The secondary magnetic field is created by subsurface conductive materials behaving as an inductor as the primary magnetic field is passed through them.

Terrain conductivity systems, such as the Geonics EM-31 used in this investigation, are commonly used to delineate variations in ground conductivity. There are two components of the induced magnetic field measured by the Geonics EM-31 equipment. The first is the quadrature-phase (out of phase) component that measures the bulk conductivity of soil and groundwater. The second is the in-phase component that is relatively more sensitive to large metallic objects, such as pipes, drums, and underground storage tanks. By observing the response of the in-phase and quadrature-phase components, it is possible to differentiate whether a change in bulk conductivity is due to the presence of buried metallic objects or due to changes in subsurface soil conditions or pore fluid conductivity.

#### **4.1.5 Field Procedures**

The GPR, EM, TDEM, and terrain conductivity field investigation was performed during the period from October 17, 2005 through October 21, 2005.

In order to delineate targets, GPR data were acquired along profiles in two directions perpendicular to each other, in a 5-foot by 5-foot grid. These data were post processed and interpreted.

EM data were acquired along profiles, in order to identify subsurface utilities. These data were used in conjunction with the GPR datasets to identify subsurface utilities. The results were marked and surveyed in the field.

TDEM data were acquired along profiles in one direction, with 5 feet between profiles. Data were processed and plotted as plan view maps. TDEM targets were classified as potential tanks or subsurface metallic objects likely not associated with tanks.

Terrain conductivity data were acquired along profiles in one direction, with 5 feet between profiles. Data were processed and plotted as plan view maps. Targets were identified as conductivity highs. The results of the geophysical investigation are shown on Figure 3.

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#### **4.2 Subsurface Soil Investigation**

To determine the presence or absence of impact to subsurface soil by constituents of concern, General Engineering collected soil samples from six subsurface soil borings on October 31, 2005, for analysis. The soil boring locations within Site 24a (soil borings SB-46 through SB-50, and SB-56) were selected to correspond to areas containing potentially containing subsurface materials of concern as observed during the geophysical evaluation, or were selected based on visual observations at the site. This sampling was accomplished using direct push technology (DPT) provided by Geologic Exploration, Inc. of Statesville, North Carolina (Geologic Exploration). The locations of the soil borings are shown on Figure 3. These borings were advanced to a depth of 15 feet below land surface (bls). Soil samples were collected from the borings at 3-4 feet bls, 7-8 feet bls, 11-12 feet bls, and 14-15 feet bls. All soil samples were inspected for indications of impact by constituents of concern, such as petroleum odors, discoloration, or visible sheen. Soil boring logs are attached as Appendix I of this document.

The soil samples were screened for the presence of organic vapors using a portable photoionization detector (PID). The PID measures the concentration of organic compounds in the vapor space above a soil sample resulting from volatilization of organic compounds contained in the soil. To screen the soils, each sample was placed in a clean, resealable polyethylene bag. The bag was sealed, and the sample was allowed to equilibrate for approximately 5 minutes, after which time a small opening was made in the bag. The probe of the PID was then inserted into the bag, and the airspace above the soil was screened for organic vapors.

To assess the subsurface soil quality, one soil sample was collected from each soil boring at the sampled depth interval with the highest PID reading and submitted for laboratory analysis. The soil samples listed below from each boring were sent to the laboratory for analysis:

Soil Boring	Depth of Interval of Collected Soil Sample (feet bbls)	PID reading in parts per million (ppm)
SB-46	7-8	2.2
SB-47	7-8	4.5
SB-48	14-15	15.0
SB-49	3-4	5.6
SB-50	7-8	124.0
SB-56	7-8	7.3

Following completion of the sampling activities, all borings were abandoned by filling the boreholes with hydrated bentonite. Soil samples were submitted to Pace Analytical Service, Inc. (Pace) in Huntersville, North Carolina (North Carolina Certification No. 37706) for analysis of volatile organic compounds (VOCs) by EPA Method 8260B with EPA 5035 sample preparation, semi-volatile organic compounds (SVOCs) by EPA Method 8270C with EPA 3545 sample preparation, and total chromium and lead by SW 846 Method 6010B. Copies of the Certificates of Analysis and Chain of Custody Record for the soil samples are provided in Appendix II.

Methylene chloride was detected in soil samples SB-47, SB-48, SB-49, SB-50, and SB-56 at concentrations of 8.3 micrograms per kilogram (ug/kg), 6.5 ug/kg, 13 ug/kg, 400 ug/kg, and 12 ug/kg, respectively. Methylene chloride is a common laboratory contaminant and its detection in these samples is considered most likely the result of laboratory contamination. Additionally, the reported concentrations of methylene chloride are below the NCDENR Soil to Water Maximum Contaminant Concentration (MSCC) for five of the six detections. Therefore, the analytical results are not considered indicative of significant impact.

Results of soil analysis for the soil samples indicate that no SVOCs or VOCs were detected in soil samples SB-46, SB-47, SB-48, or SB-56 (with the exception of methylene chloride). However, organic constituents of concern were detected in soil samples SB-49 and SB-50, as shown in Table 1.

The naphthalene, 2-methylnaphthalene, and methylene chloride concentrations detected in soil sample SB-50 of 8.7 mg/kg, 11.0 mg/kg, and 0.4 mg/kg, respectively, were above the respective NCDENR MSCCs of 0.58 mg/kg, 3.0 mg/kg, and 0.02 mg/kg; however, the concentrations were below the EPA Region 9 Residential Preliminary Remediation Goals (PRGs) of 56.0 mg/kg for naphthalene, and 9.1 mg/kg for methylene chloride. There is no PRG for 2-methylnaphthalene.

Lead and chromium were detected in all soil samples, as shown in Table 1. The detected lead and chromium concentrations were below the NCDENR MSCCs, with the exception of the concentration of total chromium detected in sample SB-48 (85 mg/kg) which was above the MSCC for hexavalent and trivalent chromium (the MSCC is 27 mg/kg); however, the concentration of chromium detected in this sample is still below the EPA Region 9 Residential PRG of 210 mg/kg. Therefore, the analytical results are not indicative of significant impact. Furthermore, chromium is a naturally occurring metal in soil and groundwater. Although there are no available background chromium data for soil in the vicinity of the subject site, the chromium detected in the subject site soil samples is believed to be indicative of natural conditions.

#### 4.3 Groundwater Investigation

The groundwater investigation at the subject site consisted of the collection and analysis of one groundwater sample from a temporary groundwater monitoring well installed on site (sample SB-50-GW). The sample was collected on October 31, 2005.

Temporary groundwater monitoring well SB-50-GW was installed in soil boring location SB-50. Groundwater contamination was suspected at this location based on visual and olfactory observations during the subsurface soil investigation. The 1-inch diameter temporary groundwater monitoring well was installed by Geologic Exploration using DPT. The total well depth for temporary groundwater monitoring well SB-50-GW was 15.0 feet bls and the measured depth to groundwater was 5.6 feet bls. Figure 3 shows the location of the groundwater temporary monitoring well. A temporary groundwater monitoring well was also installed in soil boring location SB-54 to a total depth of 24 feet bls; however, there was no groundwater recharge in the well. Therefore, a groundwater sample was not collected.

Groundwater samples collected from the temporary groundwater monitoring well SB-50-GW were analyzed by Pace for petroleum related contaminants in accordance with the following methods:

- Lead and chromium using EPA Method 200.7,

- SVOCs using EPA Method 625, and
- VOCs, including IPE, MTBE, and EDB, using EPA Method 8021.

The detected constituents in the groundwater sample are summarized on Table 2. Certificates of Analysis are provided in Appendix II.

As shown in Table 2, several constituents of concern were detected in sample SB-50-GW at levels exceeding the NCDENR 15A NCAC 2L .0115 Groundwater Quality Standards (GWQS).

The results of the groundwater analysis indicate groundwater impact from petroleum hydrocarbons and likely other constituents of concern within the subject site. This impact is most likely related to an undocumented release(s) of petroleum from USTs previously on site and/or a release of constituents of concern associated with the previous operations that occurred at the subject site. It is not possible to accurately determine the extent of groundwater contamination based solely on the groundwater data collected from one temporary monitoring well.

## **5.0 Conclusions and Recommendations**

To determine the presence or absence of impact to subsurface soil and/or groundwater at the subject site, General Engineering performed a geophysical evaluation, and a preliminary site assessment that included the collection and analysis of soil samples and groundwater samples. Underground utilities, metallic anomalies not suspected to be associated with USTs and metallic anomalies potentially associated with USTs were identified during the geophysical survey.

Results of analysis of soil samples are not considered indicative of significant impact. Lead and total chromium compounds detected in the subsurface soil are most likely naturally occurring within the soil and the concentrations detected are likely representative of typical background concentrations in this area; however, additional background samples would need to be collected for further confirmation.

The analytical results for groundwater from temporary groundwater monitoring well SB-50-GW are indicative of groundwater impact. Constituents of concern were detected at concentrations exceeding the NCDENR GWQS in the groundwater sample collected from the temporary groundwater monitoring well. With only one temporary groundwater monitoring well location, it is not possible to accurately estimate the extent of groundwater impact.

The water table at the subject site was encountered at a depth of approximately 5.6 feet bls. Therefore, groundwater would possibly be encountered during construction within the subject site.

Further groundwater and/or soil investigation is recommended to determine the extent and severity of soil and groundwater impact underlying the subject site. It is recommended that the NCDOT notify NCDENR of the soil and groundwater impact identified during this investigation.

**Table 1**  
**Summary of Detected Constituents of Concern in Soil Samples**

**Multi-Modal Rail Station  
 Site 24a  
 WBS Element # 32179**

<b>Constituent Analyzed</b>	<b>SB-46</b>	<b>SB-47</b>	<b>SB-48</b>	<b>SB-49</b>	<b>SB-50</b>	<b>SB-56</b>	<b>NCDENR MSCC</b>	<b>Region 9 Residential PRG</b>
Total Chromium	9.2	1.6	85*	10	20	12	27	210
Lead	95	5.4	10	32	20	51	270	400
Naphthalene	ND	ND	ND	0.0065	8.7*	ND	0.58	56
Dibenzofuran	ND	ND	ND	ND	0.5	ND	4.7	150
Fluorene	ND	ND	ND	ND	1.2	ND	44	2,700
2-methylNaphthalene	ND	ND	ND	ND	11*	ND	3	**
Phenanthrene	ND	ND	ND	ND	2.1	ND	60	**
n-butylbenzene	ND	ND	ND	ND	1.2	ND	4	240
sec-butylbenzene	ND	ND	ND	ND	1.4	ND	3	220
Isopropylbenzene	ND	ND	ND	ND	0.68	ND	2	570
Methylene chloride	ND	0.0083	0.0065	0.013	0.4*	0.012	0.02	9.1
n-propylbenzene	ND	ND	ND	ND	1.3	ND	2	240
Total Xylenes	ND	ND	ND	ND	0.056	ND	5	270

Notes:

1) All concentrations are in milligrams per kilogram (mg/kg)

2) ND= Not Detected

\* = Detected concentration is above the NCDENR MSCC; however, it is below the EPA Region 9 Residential PRG.

\*\* = No EPA Region 9 Residential PRG has been established for this constituent.

**Table 2**  
**Summary of Detected Constituents of Concern**  
**in Temporary Groundwater Monitoring Well SB-50-GW**

**Multi-Modal Rail Station**  
**Site 24a**  
**Charlotte, North Carolina**  
**WBS Element # 32179**

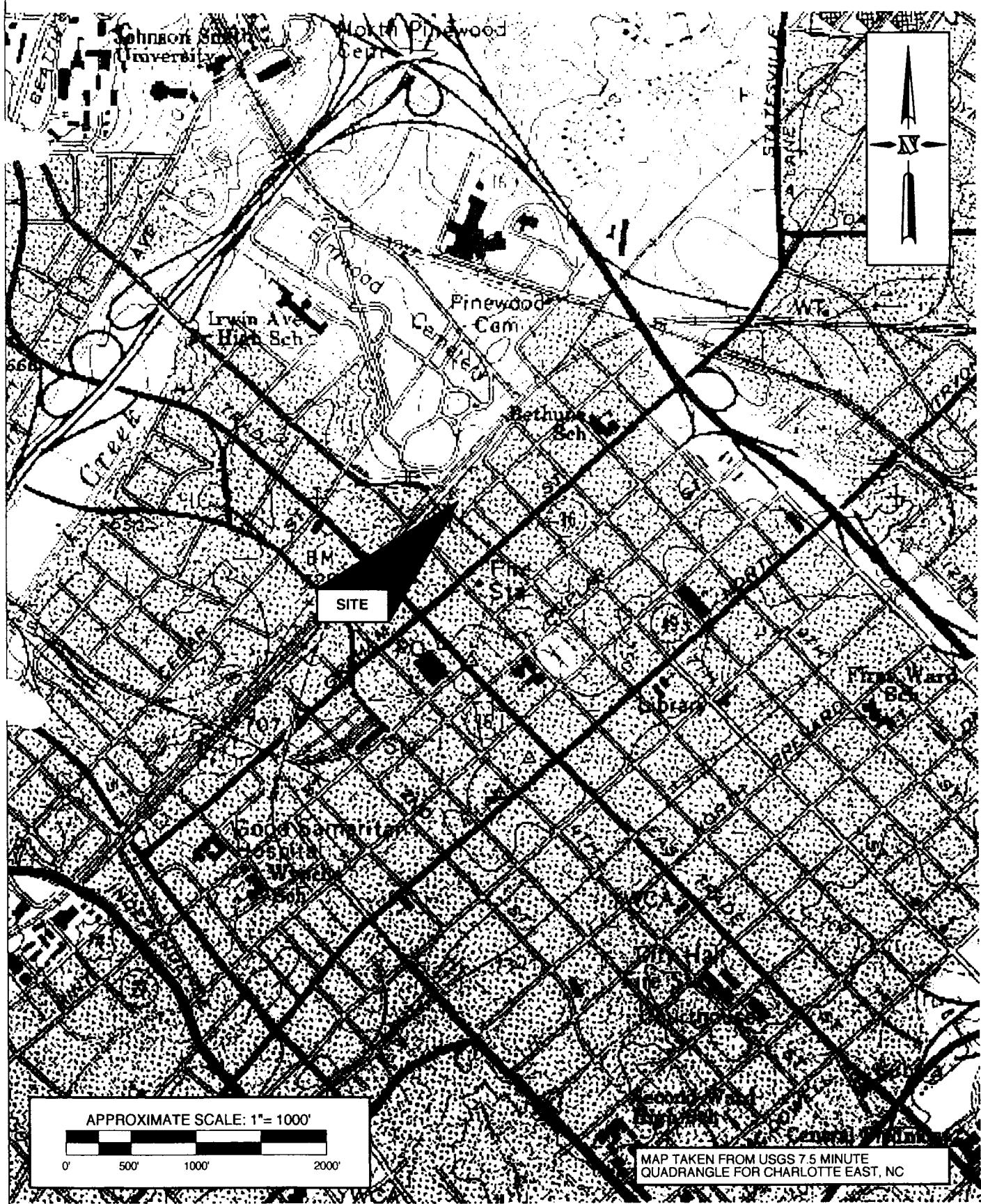
Constituent	Detected Concentration	NCDENR 15A NCAC 2L .0115 GWQS
Acenaphthene	33	80
Acenaphthylene	7.2	200
Anthracene	10	2000
Naphthalene	71	20
Di-n-butylphthalate	14	700
Fluoranthene	11	280
Fluorene	42	280
Phenanthrene	41	200
Pyrene	14	200
sec-butylbenze	10	70
Carbon tetrachloride	<b>8.2</b>	0.30
Chloroform	<b>8.9</b>	0
Chromium	760	50
Lead	3600	15

**NCDENR 15A**  
**NCAC 2L .0115**  
**GWQS**

80  
 210  
 2100  
 21  
 700  
 280  
 280  
 210  
 210  
 70  
 0.30  
 0  
 50  
 15

Notes:

- 1) All concentrations shown are in micrograms per liter ( $\mu\text{g/L}$ )
- 2) ND = Not Detected
- 3) Bold = concentrations exceeding the NCDENR  
15A NCAC 2L .0115 GWQS Standards.



GENERAL ENGINEERING & ENVIRONMENTAL, LLC  
Member of THE GEL GROUP, INC.



Post Office Box 1406  
Research Triangle Park, NC  
27709  
(919) 544-1100

PROJECT: nodt01005C

MULTI MODAL RAIL STATION  
SITE 24A  
CHARLOTTE, NORTH CAROLINA  
WBS ELEMENT NO. 32179

SITE LOCATION MAP

FIGURE  
1

DATE: December 22, 2005

DRAWN BY: UKH APPRV. BY: RMM



GENERAL ENGINEERING & ENVIRONMENTAL of NC, Inc.

An Affiliate of THE GEL GROUP, Inc.



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Research Triangle Park, NC 27709  
(909) 554-1100

PROJECT: ncdt01005c

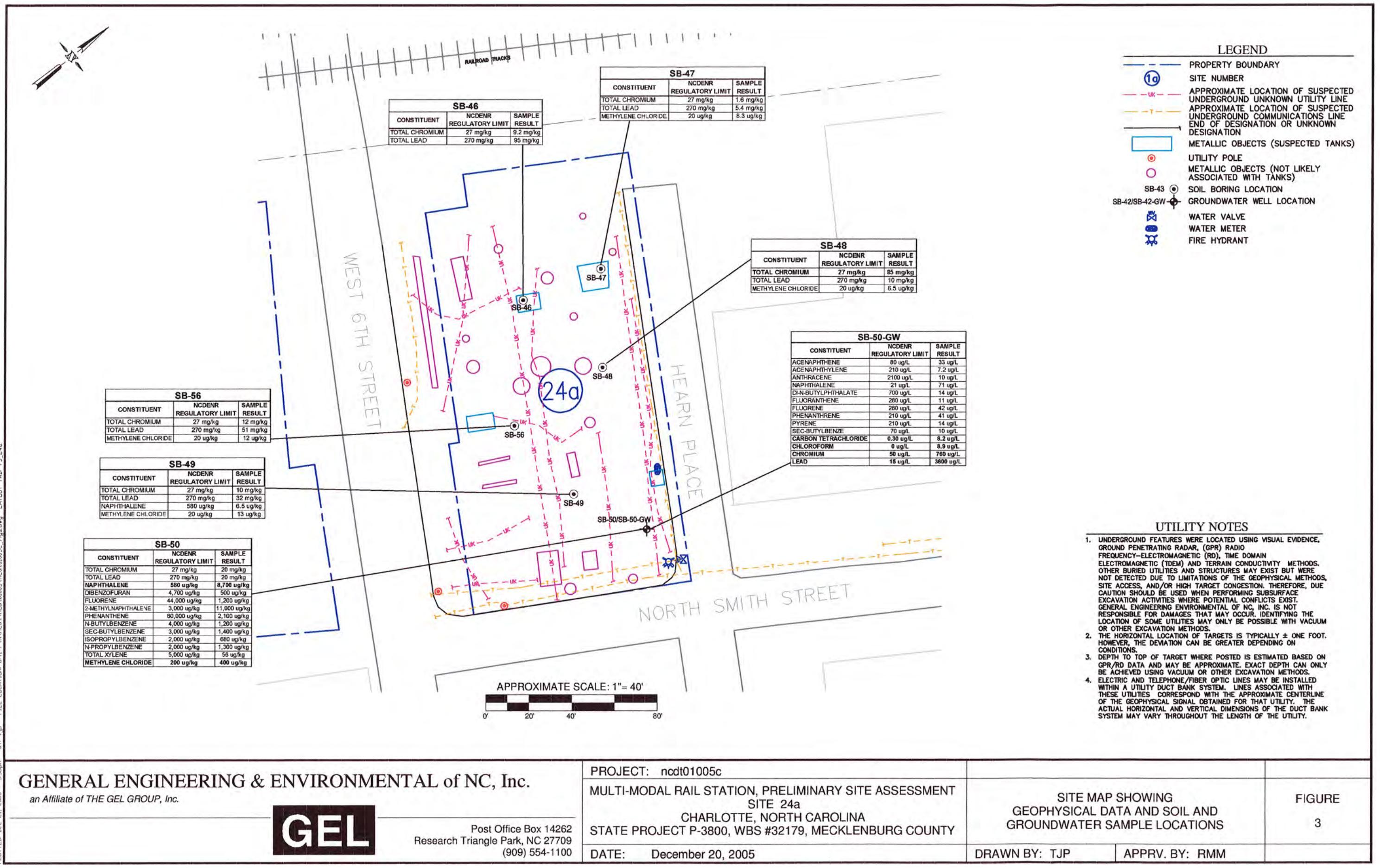
MULTI-MODAL RAIL STATION, PRELIMINARY SITE ASSESSMENT  
SITES 1a, 1b, 1c, 1d, 2a, 2b, 2c, 11, 12, 13, & 24a  
CHARLOTTE, NORTH CAROLINA  
STATE PROJECT P-3800, WBS #32179, MECKLENBURG COUNTY

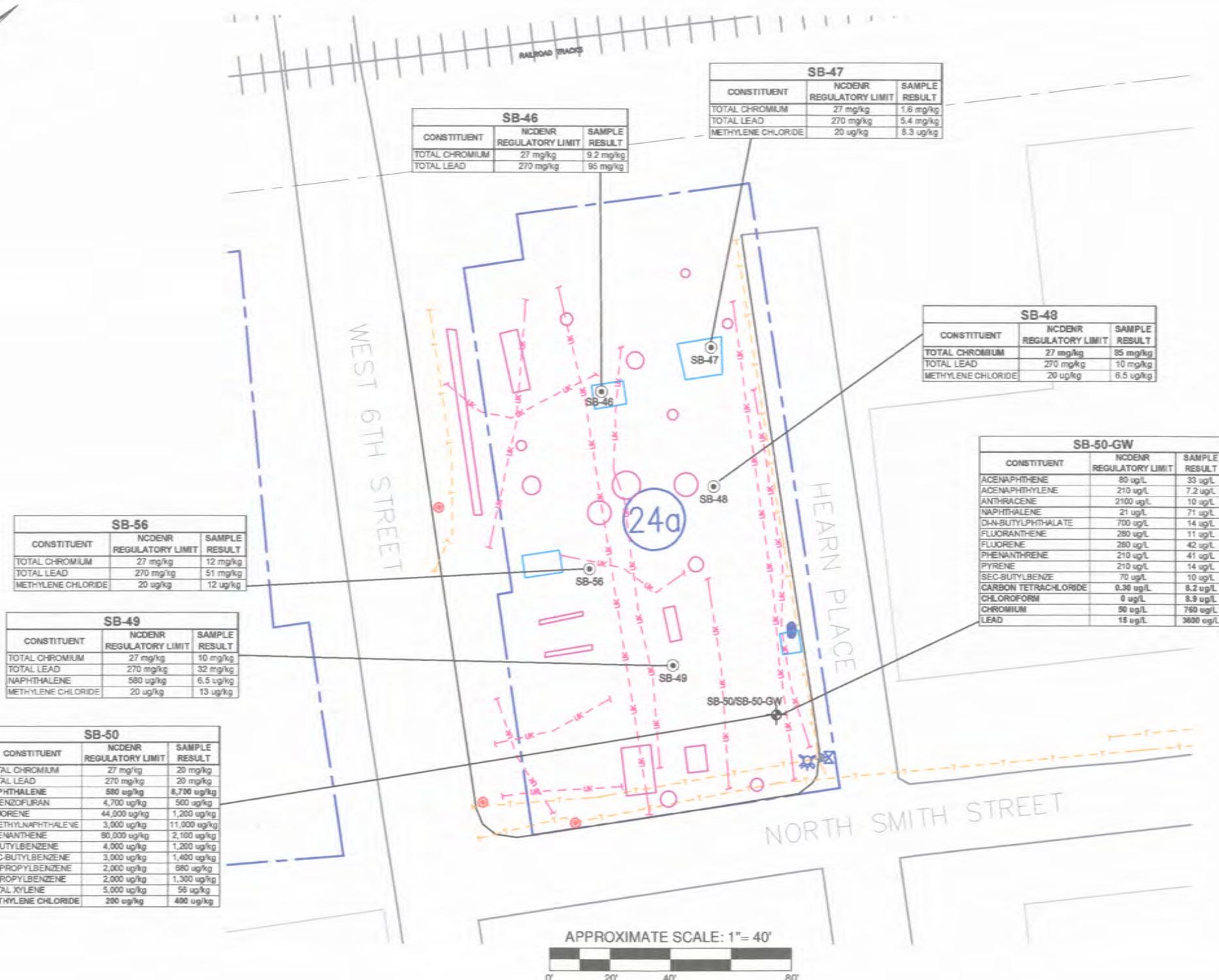
DATE: December 19, 2005

SUBJECT SITE AND SURROUNDING PROPERTIES

FIGURE  
2

DRAWN BY: TJP APPRV. BY: RMM



**LEGEND**

- PROPERTY BOUNDARY** (1a)
- SITE NUMBER**
- APPROXIMATE LOCATION OF SUSPECTED UNDERGROUND UNKNOWN UTILITY LINE** (pink dashed line)
- APPROXIMATE LOCATION OF SUSPECTED UNDERGROUND COMMUNICATIONS LINE** (orange dashed line)
- END OF DESIGNATION OR UNKNOWN DESIGNATION** (arrow)
- METALLIC OBJECTS (SUSPECTED TANKS)** (blue square)
- UTILITY POLE** (red circle)
- METALLIC OBJECTS (NOT LIKELY ASSOCIATED WITH TANKS)** (pink circle)
- SOIL BORING LOCATION** (black circle)
- GROUNDWATER WELL LOCATION** (black circle with cross)
- WATER VALVE** (blue circle with cross)
- WATER METER** (blue circle)
- FIRE HYDRANT** (purple circle)

**UTILITY NOTES**

1. UNDERGROUND FEATURES WERE LOCATED USING VISUAL EVIDENCE, GROUND PENETRATING RADAR, (GPR) RADIO FREQUENCY-ELECTROMAGNETIC (RF), TIME DOMAIN ELECTROMAGNETIC (TDEM) AND TERRAIN CONDUCTIVITY METHODS. OTHER BURIED UTILITIES AND STRUCTURES MAY EXIST BUT WERE NOT DETECTED DUE TO LIMITATIONS OF THE GEOPHYSICAL METHODS, SITE ACCESS, AND/OR HIGH TARGET CONGESTION. THEREFORE, DUE CAUTION SHOULD BE USED WHEN PERFORMING SUBSURFACE EXCAVATION ACTIVITIES WHERE POTENTIAL CONFLICTS EXIST. GENERAL ENGINEERING ENVIRONMENTAL OF NC, INC. IS NOT RESPONSIBLE FOR DAMAGES THAT MAY OCCUR. IDENTIFYING THE LOCATION OF SOME UTILITIES MAY ONLY BE POSSIBLE WITH VACUUM OR OTHER EXCAVATION METHODS.
2. THE HORIZONTAL LOCATION OF TARGETS IS TYPICALLY  $\pm$  ONE FOOT. HOWEVER, THE DEVIATION CAN BE GREATER DEPENDING ON CONDITIONS.
3. DEPTH TO TOP OF TARGET WHERE POSTED IS ESTIMATED BASED ON GPR/RD DATA AND MAY BE APPROXIMATE. EXACT DEPTH CAN ONLY BE ACHIEVED USING VACUUM OR OTHER EXCAVATION METHODS.
4. ELECTRIC AND TELEPHONE/FIBER OPTIC LINES MAY BE INSTALLED WITHIN A UTILITY DUCT BANK SYSTEM. LINES ASSOCIATED WITH THESE UTILITIES CORRESPOND WITH THE APPROXIMATE CENTERLINE OF THE GEOPHYSICAL SIGNAL OBTAINED FOR THAT UTILITY. THE ACTUAL HORIZONTAL AND VERTICAL DIMENSIONS OF THE DUCT BANK SYSTEM MAY VARY THROUGHOUT THE LENGTH OF THE UTILITY.

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Post Office Box 14262  
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(909) 554-1100

PROJECT: ncdt01005c

MULTI-MODAL RAIL STATION, PRELIMINARY SITE ASSESSMENT  
SITE 24a  
CHARLOTTE, NORTH CAROLINA  
STATE PROJECT P-3800, WBS #32179, MECKLENBURG COUNTY

DATE: December 20, 2005

SITE MAP SHOWING  
GEOPHYSICAL DATA AND SOIL AND  
GROUNDWATER SAMPLE LOCATIONS

DRAWN BY: TJP APPRV. BY: RMM

FIGURE  
3

## SOIL BORING LOG

Boring/Well No.: **SB-46**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 4.0'	NA	2.2	Cover material, fill (rocks, concrete, asphalt, sand, silt, and clay). PID sample collected from 3'-4' bls.	-
2	4.0' - 8.0' *	NA	2.2	Dark brown, silt, sand, and fine gravel, damp, wood fragments (fill?). PID sample collected from 7'-8' bls.	SM/SC
3	8.0' - 12.5'	NA	1.1	Brown to tan sandy-silty-clayey saprolite and unweathered rock fragments, wet at 12.5'. PID sample collected from 11.5'-12.5' bls.	ML/ CL/OL SM/SC
4				Refusal at 12.5' Total depth of boring is 12.5'	
5					
6					
7					
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

\* Only 1.5' recovered from core barrel.

## SOIL BORING LOG

Boring/Well No.: **SB-47**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 2.5'	NA		Cover material, fill (rocks, concrete, asphalt, sand, silt, and clay).	-
2	2.5' - 4.5'	NA	2.2	Stiff red/orange mottled sandy-silty-clayey saprolite, becoming softer, more friable, and less clayey with depth. PID sample collected from 3'-4' bls.	ML / CL/OL
3	4.5' - 10.0'	NA	4.5 2.2	Tan/white slightly mottled to mottled sandy saprolite with some fine gravel and unweathered rock fragments, very friable. PID samples collected from 7'-8' and 9'-10' bls.	SM / SC
4				Refusal at 10' bls. Total depth of boring is 10.0'	
5					
6					
7					
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

## SOIL BORING LOG

Boring/Well No.: **SB-48**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 3.0'	NA		Cover material, fill (rocks, concrete, gravel, sand, silt, and clay).	GC / SM / SC
2	3.0' - 4.0'	NA	1.4	Orange/red/brown mottled sandy-silty-clayey saprolite, stiff to very stiff, friable. PID sample collected from 3'-4' bls.	ML / CL/OL
3	4.0' - 7.0'	NA		Orange/brown mottled sandy-silty-clayey saprolite becoming sandier with depth. Plastic, stiff.	ML / CL/SC
4	7.0' - 13.0'	NA	14.8 5.7	Brown/tan sandy-silty-clayey saprolite, friable, soft to stiff. PID samples collected from 7'-8' and 11'-12' bls.	ML / CL/OL
5	13.0' - 14.0'	NA		White fractured, unweathered rock, dry	-
6	14.0' - 15.0'	NA	15.0	Brown/tan sandy-silty-clayey saprolite, friable, soft to stiff. PID sample collected from 14'-15' bls.	ML / CL/OL
7				Total depth of boring is 15.0'	
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

## SOIL BORING LOG

Boring/Well No.: **SB-49**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 7.0'	NA	5.6	Cover material, fill (rocks, concrete, gravel, sand, silt, and clay).	GC/ SC/ ML
2	7.0' - 10.0'	NA	2.5	Gray/brown silty fine sand grading to gray mottle clayey silt and silty clay. PID sample collected from 3'-4' bls.	SC/ ML/ CL
3	10.0' - 11.5'	NA	1.6	Gray mottled silty clay and clayey silt, soft to stiff, plastic, but friable. PID sample collected from 11'-12' bls	ML / CL/SC
4	11.5' - 15.0'	NA	0.9	Brown mottled saprolite, very coarse to fine sand becoming more silty with depth, damp, friable. PID sample collected from 14'-15' bls.	SC/ ML/ CL
5				Total depth of boring is 15.0'	
6					
7					
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

## SOIL BORING LOG

Boring/Well No.: **SB-50**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 7.0'	NA	3.1	Cover material, fill (rocks, concrete, gravel, sand, silt, and clay). PID sample collected from 3'-4' bls.	GC / SM / SC
2	7.0' - 9.0'	NA	124.0	Brown very fine to fine sand, wet, strong petroleum odor, becoming more sandy-silty-and clayey with depth. PID samples collected from 7'-8'	SM / SC
3	9.0' - 9.5'	NA		Orange/gray silty clay, soft, grading to sandy-clayey silt.	ML / CL/SC
4	9.5' - 11.0'	NA	10.0	Dark brown sandy silt and with some fine gravel, damp, petroleum odor, pieces of hard black plastic(?) PID sample collected from 11'-12' bls.	ML / CL/SC
5	11.0' - 15.0'	NA	2.5	Brown mottled sandy-silty-clayey saprolite with some fine gravel and unweathered rock, very friable. PID sample collected from 14'-15' bls.	ML / CL/OL
6				Total depth of boring is 15.0'	
7					
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

## SOIL BORING LOG

Boring/Well No.: **SB-56**  
 Date Started: 10/31/05  
 Date Completed: 10/31/05

No.	Depth Interval	Blow Counts	PID (ppm)	Soil Description	Soil Type
1	0' - 7.0'	NA	6.3	Cover material, fill (rocks, concrete, gravel, sand, silt, and clay). PID sample collected from 3'-4' bls.	GC/ SC/ ML
2	7.0' - 9.0'	NA	7.3	Gray/brown silty fine sand grading to gray mottle clayey silt and silty clay. PID sample collected from 7'-8' bls.	SC/ ML/ CL
3	9.0' - 11.0'	NA	3.5	Gray mottled silty clay and clayey silt, soft to stiff, plastic, but friable. PID sample collected from 11'-12' bls	ML / CL/SC
4	11.0' - 15.0'	NA	2.4	Brown mottled saprolite, very coarse to fine sand becoming more silty with depth, damp, friable. PID sample collected from 14'-15' bls.	SC/ ML/ CL
5				Total depth of boring is 15.0'	
6					
7					
8					
9					
10					
11					
12					

Notes: NA - Not Applicable as soil samples were collecting using direct push technology (DPT) and collected a continuous 4' soil core.

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288465  
 Client Sample ID: SB-46-8FT

Project Sample Number: 92106545-002  
 Matrix: Soil

Date Collected: 10/31/05 10:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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### Metals

Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010						
Chromium	9.2	mg/kg	0.25	11/10/05 09:32 ALV	7440-47-3		
Lead	95.	mg/kg	0.62	11/10/05 09:32 ALV	7439-92-1		
Date Digested	11/02/05 12:00						
	11/02/05 12:00						

### Wet Chemistry

Percent Moisture	Method: % Moisture						
Percent Moisture	19.9	%	11/02/05 10:41 TNS				

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	410	11/13/05 00:49 BET	83-32-9		
Acenaphthylene	ND	ug/kg	410	11/13/05 00:49 BET	208-96-8		
Anthracene	ND	ug/kg	410	11/13/05 00:49 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	410	11/13/05 00:49 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	410	11/13/05 00:49 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	410	11/13/05 00:49 BET	56-55-3		
Benzoic acid	ND	ug/kg	2100	11/13/05 00:49 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	410	11/13/05 00:49 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	820	11/13/05 00:49 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	410	11/13/05 00:49 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	410	11/13/05 00:49 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	410	11/13/05 00:49 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	820	11/13/05 00:49 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	820	11/13/05 00:49 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	410	11/13/05 00:49 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	410	11/13/05 00:49 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	410	11/13/05 00:49 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	410	11/13/05 00:49 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	410	11/13/05 00:49 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	410	11/13/05 00:49 BET	7005-72-3		
Chrysene	ND	ug/kg	410	11/13/05 00:49 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	410	11/13/05 00:49 BET	53-70-3		
Dibenzofuran	ND	ug/kg	410	11/13/05 00:49 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	410	11/13/05 00:49 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	410	11/13/05 00:49 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	410	11/13/05 00:49 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	820	11/13/05 00:49 BET	91-94-1		

Date: 11/14/05

Page: 6 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NFI AP	FR7648

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### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NFI AP	FR7627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288465  
 Client Sample ID: SB-46-8FT

Project Sample Number: 92106545-002  
 Matrix: Soil

Date Collected: 10/31/05 10:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dichlorophenol	ND	ug/kg	410	11/13/05 00:49 BET	120-83-2		
Diethylphthalate	ND	ug/kg	410	11/13/05 00:49 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	410	11/13/05 00:49 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	410	11/13/05 00:49 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	410	11/13/05 00:49 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	410	11/13/05 00:49 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2100	11/13/05 00:49 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	410	11/13/05 00:49 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	410	11/13/05 00:49 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	410	11/13/05 00:49 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	410	11/13/05 00:49 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	410	11/13/05 00:49 BET	117-81-7		
Fluoranthene	ND	ug/kg	410	11/13/05 00:49 BET	206-44-0		
Fluorene	ND	ug/kg	410	11/13/05 00:49 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	410	11/13/05 00:49 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	410	11/13/05 00:49 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	410	11/13/05 00:49 BET	77-47-4		
Hexachloroethane	ND	ug/kg	410	11/13/05 00:49 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	410	11/13/05 00:49 BET	193-39-5		
Isophorone	ND	ug/kg	410	11/13/05 00:49 BET	78-59-1		
2-Methylnaphthalene	ND	ug/kg	410	11/13/05 00:49 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	410	11/13/05 00:49 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	410	11/13/05 00:49 BET			
Naphthalene	ND	ug/kg	410	11/13/05 00:49 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2100	11/13/05 00:49 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2100	11/13/05 00:49 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2100	11/13/05 00:49 BET	100-01-6		
Nitrobenzene	ND	ug/kg	410	11/13/05 00:49 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	410	11/13/05 00:49 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2100	11/13/05 00:49 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	410	11/13/05 00:49 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	410	11/13/05 00:49 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2100	11/13/05 00:49 BET	87-86-5		
Phenanthrene	ND	ug/kg	410	11/13/05 00:49 BET	85-01-8		
Phenol	ND	ug/kg	410	11/13/05 00:49 BET	108-95-2		
Pyrene	ND	ug/kg	410	11/13/05 00:49 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	410	11/13/05 00:49 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	410	11/13/05 00:49 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	410	11/13/05 00:49 BET	88-06-2		

Date: 11/14/05

Page: 7 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288465  
Client Sample ID: SB-46-8FT

Project Sample Number: 92106545-002  
Matrix: Soil

Date Collected: 10/31/05 10:00  
Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Nitrobenzene-d5 (S)	44	%		11/13/05 00:49 BET	4165-60-0		
2-Fluorobiphenyl (S)	29	%		11/13/05 00:49 BET	321-60-8		
Terphenyl-d14 (S)	56	%		11/13/05 00:49 BET	1718-51-0		
Phenol-d5 (S)	50	%		11/13/05 00:49 BET	4165-62-2		
2-Fluorophenol (S)	42	%		11/13/05 00:49 BET	367-12-4		
2,4,6-Tribromophenol (S)	49	%		11/13/05 00:49 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	98.	11/09/05 15:42 DLK	67-64-1
Benzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	71-43-2
Bromobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	108-86-1
Bromochloromethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-27-4
Bromoform	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-25-2
Bromomethane	ND	ug/kg	9.8	11/09/05 15:42 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	98.	11/09/05 15:42 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	4.9	11/09/05 15:42 DLK	56-23-5
Chlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	108-90-7
Chloroethane	ND	ug/kg	9.8	11/09/05 15:42 DLK	75-00-3
Chloroform	ND	ug/kg	4.9	11/09/05 15:42 DLK	67-66-3
Chloromethane	ND	ug/kg	9.8	11/09/05 15:42 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	4.9	11/09/05 15:42 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	4.9	11/09/05 15:42 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.9	11/09/05 15:42 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	4.9	11/09/05 15:42 DLK	106-93-4
Dibromomethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	9.8	11/09/05 15:42 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	107-06-2
1,1-Dichloroethene	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-35-4

Date: 11/14/05

Page: 8 of 108

### REPORT OF LABORATORY ANALYSIS

#### Asheville Certification IDs

NC Wastewater 40  
NC Drinking Water 37712  
SC Environmental 99030  
FI NFI AP FR7648

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#### Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706  
SC 99006  
FI NFI AP FR7629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288465  
 Client Sample ID: SB-46-8FT

Project Sample Number: 92106545-002  
 Matrix: Soil

Date Collected: 10/31/05 10:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
cis-1,2-Dichloroethene	ND	ug/kg	4.9	11/09/05 15:42 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	4.9	11/09/05 15:42 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	4.9	11/09/05 15:42 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	4.9	11/09/05 15:42 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	4.9	11/09/05 15:42 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	4.9	11/09/05 15:42 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	4.9	11/09/05 15:42 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	4.9	11/09/05 15:42 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	4.9	11/09/05 15:42 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	4.9	11/09/05 15:42 DLK	87-68-3		
2-Hexanone	ND	ug/kg	49.	11/09/05 15:42 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	4.9	11/09/05 15:42 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	4.9	11/09/05 15:42 DLK	99-87-6		
Methylene chloride	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-09-2		
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	49.	11/09/05 15:42 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	4.9	11/09/05 15:42 DLK	1634-04-4		
Naphthalene	ND	ug/kg	4.9	11/09/05 15:42 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	103-65-1		
Styrene	ND	ug/kg	4.9	11/09/05 15:42 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	4.9	11/09/05 15:42 DLK	127-18-4		
Toluene	ND	ug/kg	4.9	11/09/05 15:42 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	79-00-5		
Trichloroethene	ND	ug/kg	4.9	11/09/05 15:42 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	4.9	11/09/05 15:42 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	4.9	11/09/05 15:42 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	4.9	11/09/05 15:42 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	49.	11/09/05 15:42 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	9.8	11/09/05 15:42 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	4.9	11/09/05 15:42 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	9.8	11/09/05 15:42 DLK			
o-Xylene	ND	ug/kg	4.9	11/09/05 15:42 DLK	95-47-6		
Toluene-d8 (S)	90	%		11/09/05 15:42 DLK	2037-26-5		

Date: 11/14/05

Page: 9 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FL NELAP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288465  
 Client Sample ID: SB-46-8FT

Project Sample Number: 92106545-002  
 Matrix: Soil

Date Collected: 10/31/05 10:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed	By	CAS No.	Qual	RegLmt
4-Bromofluorobenzene (S)	68	%		11/09/05 15:42	DLK	460-00-4	3	
Dibromofluoromethane (S)	114	%		11/09/05 15:42	DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	115	%		11/09/05 15:42	DLK	17060-07-0		

## REPORT OF LABORATORY ANALYSIS

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 FI NFI AP F87648

Charlotte Certification IDs  
 NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288473  
 Client Sample ID: SB-47-8FT

Project Sample Number: 92106545-003  
 Matrix: Soil

Date Collected: 10/31/05 10:10  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
<b>Metals</b>							
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010						
Chromium	1.6	mg/kg	0.21	11/10/05 09:36 ALV	7440-47-3		
Lead	5.4	mg/kg	0.53	11/10/05 09:36 ALV	7439-92-1		
Date Digested	11/02/05 12:00			11/02/05 12:00			

### Wet Chemistry

Percent Moisture	Method: % Moisture
Percent Moisture	6.7 %

11/02/05 10:42 TNS

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	350	11/13/05 01:25 BET	83-32-9		
Acenaphthylene	ND	ug/kg	350	11/13/05 01:25 BET	208-96-8		
Anthracene	ND	ug/kg	350	11/13/05 01:25 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	350	11/13/05 01:25 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	350	11/13/05 01:25 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	350	11/13/05 01:25 BET	56-55-3		
Benzoic acid	ND	ug/kg	1800	11/13/05 01:25 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	350	11/13/05 01:25 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	710	11/13/05 01:25 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	350	11/13/05 01:25 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	350	11/13/05 01:25 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	350	11/13/05 01:25 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	710	11/13/05 01:25 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	710	11/13/05 01:25 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	350	11/13/05 01:25 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	350	11/13/05 01:25 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	350	11/13/05 01:25 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	350	11/13/05 01:25 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	350	11/13/05 01:25 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	350	11/13/05 01:25 BET	7005-72-3		
Chrysene	ND	ug/kg	350	11/13/05 01:25 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	350	11/13/05 01:25 BET	53-70-3		
Dibenzofuran	ND	ug/kg	350	11/13/05 01:25 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	350	11/13/05 01:25 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	350	11/13/05 01:25 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	350	11/13/05 01:25 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	710	11/13/05 01:25 BET	91-94-1		

Date: 11/14/05

Page: 11 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

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 SC Environmental 99030  
 FL NEI ADP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FL NEI ADP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288473  
 Client Sample ID: SB-47-8FT

Project Sample Number: 92106545-003  
 Matrix: Soil

Date Collected: 10/31/05 10:10  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dichlorophenol	ND	ug/kg	350	11/13/05 01:25 BET	120-83-2		
Diethylphthalate	ND	ug/kg	350	11/13/05 01:25 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	350	11/13/05 01:25 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	350	11/13/05 01:25 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	350	11/13/05 01:25 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	350	11/13/05 01:25 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	1800	11/13/05 01:25 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	350	11/13/05 01:25 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	350	11/13/05 01:25 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	350	11/13/05 01:25 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	350	11/13/05 01:25 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	350	11/13/05 01:25 BET	117-81-7		
Fluoranthene	ND	ug/kg	350	11/13/05 01:25 BET	206-44-0		
Fluorene	ND	ug/kg	350	11/13/05 01:25 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	350	11/13/05 01:25 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	350	11/13/05 01:25 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	350	11/13/05 01:25 BET	77-47-4		
Hexachloroethane	ND	ug/kg	350	11/13/05 01:25 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	350	11/13/05 01:25 BET	193-39-5		
Isophorone	ND	ug/kg	350	11/13/05 01:25 BET	78-59-1		
2-Methylnaphthalene	ND	ug/kg	350	11/13/05 01:25 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	350	11/13/05 01:25 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	350	11/13/05 01:25 BET			
Naphthalene	ND	ug/kg	350	11/13/05 01:25 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	1800	11/13/05 01:25 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	1800	11/13/05 01:25 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	1800	11/13/05 01:25 BET	100-01-6		
Nitrobenzene	ND	ug/kg	350	11/13/05 01:25 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	350	11/13/05 01:25 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	1800	11/13/05 01:25 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	350	11/13/05 01:25 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	350	11/13/05 01:25 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	1800	11/13/05 01:25 BET	87-86-5		
Phenanthrene	ND	ug/kg	350	11/13/05 01:25 BET	85-01-8		
Phenol	ND	ug/kg	350	11/13/05 01:25 BET	108-95-2		
Pyrene	ND	ug/kg	350	11/13/05 01:25 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	350	11/13/05 01:25 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	350	11/13/05 01:25 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	350	11/13/05 01:25 BET	88-06-2		

Date: 11/14/05

Page: 12 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288473  
 Client Sample ID: SB-47-8FT

Project Sample Number: 92106545-003  
 Matrix: Soil

Date Collected: 10/31/05 10:10  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Nitrobenzene-d5 (S)	44	%		11/13/05 01:25 BET	4165-60-0		
2-Fluorobiphenyl (S)	50	%		11/13/05 01:25 BET	321-60-8		
Terphenyl-d14 (S)	49	%		11/13/05 01:25 BET	1718-51-0		
Phenol-d5 (S)	48	%		11/13/05 01:25 BET	4165-62-2		
2-Fluorophenol (S)	40	%		11/13/05 01:25 BET	367-12-4		
2,4,6-Tribromophenol (S)	66	%		11/13/05 01:25 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	95.	11/09/05 06:23 DLK	67-64-1
Benzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	71-43-2
Bromobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	108-86-1
Bromochloromethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	75-27-4
Bromoform	ND	ug/kg	4.7	11/09/05 06:23 DLK	75-25-2
Bromomethane	ND	ug/kg	9.5	11/09/05 06:23 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	95.	11/09/05 06:23 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	4.7	11/09/05 06:23 DLK	56-23-5
Chlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	108-90-7
Chloroethane	ND	ug/kg	9.5	11/09/05 06:23 DLK	75-00-3
Chloroform	ND	ug/kg	4.7	11/09/05 06:23 DLK	67-66-3
Chloromethane	ND	ug/kg	9.5	11/09/05 06:23 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	4.7	11/09/05 06:23 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	4.7	11/09/05 06:23 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.7	11/09/05 06:23 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	4.7	11/09/05 06:23 DLK	106-93-4
Dibromomethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	9.5	11/09/05 06:23 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	107-06-2
1,1-Dichloroethene	ND	ug/kg	4.7	11/09/05 06:23 DLK	75-35-4

Date: 11/14/05

Page: 13 of 108

### REPORT OF LABORATORY ANALYSIS

#### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NFI AP	F87648

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#### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NFI AP	F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288473  
 Client Sample ID: SB-47-8FT

Project Sample Number: 92106545-003  
 Matrix: Soil

Date Collected: 10/31/05 10:10  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
cis-1,2-Dichloroethene	ND	ug/kg	4.7	11/09/05 06:23 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	4.7	11/09/05 06:23 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	4.7	11/09/05 06:23 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	4.7	11/09/05 06:23 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	4.7	11/09/05 06:23 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	4.7	11/09/05 06:23 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	4.7	11/09/05 06:23 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	4.7	11/09/05 06:23 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	4.7	11/09/05 06:23 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	4.7	11/09/05 06:23 DLK	87-68-3		
2-Hexanone	ND	ug/kg	47.	11/09/05 06:23 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	4.7	11/09/05 06:23 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	4.7	11/09/05 06:23 DLK	99-87-6		
Methylene chloride	8.3	ug/kg	4.7	11/09/05 06:23 DLK	75-09-2	2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	47.	11/09/05 06:23 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	4.7	11/09/05 06:23 DLK	1634-04-4		
Naphthalene	ND	ug/kg	4.7	11/09/05 06:23 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	103-65-1		
Styrene	ND	ug/kg	4.7	11/09/05 06:23 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	4.7	11/09/05 06:23 DLK	127-18-4		
Toluene	ND	ug/kg	4.7	11/09/05 06:23 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	79-00-5		
Trichloroethene	ND	ug/kg	4.7	11/09/05 06:23 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	4.7	11/09/05 06:23 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	4.7	11/09/05 06:23 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	4.7	11/09/05 06:23 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	47.	11/09/05 06:23 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	9.5	11/09/05 06:23 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	4.7	11/09/05 06:23 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	9.5	11/09/05 06:23 DLK			
o-Xylene	ND	ug/kg	4.7	11/09/05 06:23 DLK	95-47-6		
Toluene-d8 (S)	96	%		11/09/05 06:23 DLK	2037-26-5		

Date: 11/14/05

Page: 14 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288473  
 Client Sample ID: SB-47-8FT

Project Sample Number: 92106545-003  
 Matrix: Soil

Date Collected: 10/31/05 10:10  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
4-Bromofluorobenzene (S)	96	%		11/09/05 06:23 DLK	460-00-4		
Dibromofluoromethane (S)	100	%		11/09/05 06:23 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	97	%		11/09/05 06:23 DLK	17060-07-0		

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI MFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI MFI AP F87627

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Solid results are reported on a dry weight basis

Lab Sample No:	926288457	Project Sample Number:	92106545-001	Date Collected:	10/31/05 09:40
Client Sample ID:	SB-48-15FT	Matrix:	Soil	Date Received:	11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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### Metals

Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010					
Chromium	85.	mg/kg	0.21	11/10/05 09:29	ALV	7440-47-3
Lead	10.	mg/kg	0.53	11/10/05 09:29	ALV	7439-92-1
Date Digested	11/02/05 12:00					
	11/02/05 12:00					

### Wet Chemistry

Percent Moisture	Method: % Moisture					
Percent Moisture	7.7	%	11/02/05 10:41 TNS			

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270					
Acenaphthene	ND	ug/kg	360	11/13/05 00:13	BET	83-32-9
Acenaphthylene	ND	ug/kg	360	11/13/05 00:13	BET	208-96-8
Anthracene	ND	ug/kg	360	11/13/05 00:13	BET	120-12-7
Benzo(k)fluoranthene	ND	ug/kg	360	11/13/05 00:13	BET	207-08-9
Benzo(b)fluoranthene	ND	ug/kg	360	11/13/05 00:13	BET	205-99-2
Benzo(a)anthracene	ND	ug/kg	360	11/13/05 00:13	BET	56-55-3
Benzoic acid	ND	ug/kg	1800	11/13/05 00:13	BET	65-85-0
Benzo(g,h,i)perylene	ND	ug/kg	360	11/13/05 00:13	BET	191-24-2
Benzyl alcohol	ND	ug/kg	710	11/13/05 00:13	BET	100-51-6
Benzo(a)pyrene	ND	ug/kg	360	11/13/05 00:13	BET	50-32-8
4-Bromophenylphenyl ether	ND	ug/kg	360	11/13/05 00:13	BET	101-55-3
Butylbenzylphthalate	ND	ug/kg	360	11/13/05 00:13	BET	85-68-7
4-Chloro-3-methylphenol	ND	ug/kg	710	11/13/05 00:13	BET	59-50-7
4-Chloroaniline	ND	ug/kg	710	11/13/05 00:13	BET	106-47-8
bis(2-Chloroethoxy)methane	ND	ug/kg	360	11/13/05 00:13	BET	111-91-1
bis(2-Chloroethyl) ether	ND	ug/kg	360	11/13/05 00:13	BET	111-44-4
bis(2-Chloroisopropyl) ether	ND	ug/kg	360	11/13/05 00:13	BET	39638-32-9
2-Chloronaphthalene	ND	ug/kg	360	11/13/05 00:13	BET	91-58-7
2-Chlorophenol	ND	ug/kg	360	11/13/05 00:13	BET	95-57-8
4-Chlorophenylphenyl ether	ND	ug/kg	360	11/13/05 00:13	BET	7005-72-3
Chrysene	ND	ug/kg	360	11/13/05 00:13	BET	218-01-9
Dibenz(a,h)anthracene	ND	ug/kg	360	11/13/05 00:13	BET	53-70-3
Dibenzofuran	ND	ug/kg	360	11/13/05 00:13	BET	132-64-9
1,2-Dichlorobenzene	ND	ug/kg	360	11/13/05 00:13	BET	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	360	11/13/05 00:13	BET	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	360	11/13/05 00:13	BET	106-46-7

Date: 11/14/05

Page: 1 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NFI AP	FR7648

### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NFI AP	FR87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288457  
 Client Sample ID: SB-48-15FT

Project Sample Number: 92106545-001  
 Matrix: Soil

Date Collected: 10/31/05 09:40  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
3,3'-Dichlorobenzidine	ND	ug/kg	710	11/13/05 00:13 BET	91-94-1		
2,4-Dichlorophenol	ND	ug/kg	360	11/13/05 00:13 BET	120-83-2		
Diethylphthalate	ND	ug/kg	360	11/13/05 00:13 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	360	11/13/05 00:13 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	360	11/13/05 00:13 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	360	11/13/05 00:13 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	360	11/13/05 00:13 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	1800	11/13/05 00:13 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	360	11/13/05 00:13 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	360	11/13/05 00:13 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	360	11/13/05 00:13 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	360	11/13/05 00:13 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	360	11/13/05 00:13 BET	117-81-7		
Fluoranthene	ND	ug/kg	360	11/13/05 00:13 BET	206-44-0		
Fluorene	ND	ug/kg	360	11/13/05 00:13 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	360	11/13/05 00:13 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	360	11/13/05 00:13 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	360	11/13/05 00:13 BET	77-47-4		
Hexachloroethane	ND	ug/kg	360	11/13/05 00:13 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	360	11/13/05 00:13 BET	193-39-5		
Isophorone	ND	ug/kg	360	11/13/05 00:13 BET	78-59-1		
2-Methylnaphthalene	ND	ug/kg	360	11/13/05 00:13 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	360	11/13/05 00:13 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	360	11/13/05 00:13 BET			
Naphthalene	ND	ug/kg	360	11/13/05 00:13 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	1800	11/13/05 00:13 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	1800	11/13/05 00:13 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	1800	11/13/05 00:13 BET	100-01-6		
Nitrobenzene	ND	ug/kg	360	11/13/05 00:13 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	360	11/13/05 00:13 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	1800	11/13/05 00:13 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	360	11/13/05 00:13 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	360	11/13/05 00:13 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	1800	11/13/05 00:13 BET	87-86-5		
Phenanthrene	ND	ug/kg	360	11/13/05 00:13 BET	85-01-8		
Phenol	ND	ug/kg	360	11/13/05 00:13 BET	108-95-2		
Pyrene	ND	ug/kg	360	11/13/05 00:13 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	360	11/13/05 00:13 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	360	11/13/05 00:13 BET	95-95-4		

Date: 11/14/05

Page: 2 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F8764R

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288457  
 Client Sample ID: SB-48-15FT

Project Sample Number: 92106545-001

Date Collected: 10/31/05 09:40

Matrix: Soil

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4,6-Trichlorophenol	ND	ug/kg	360	11/13/05 00:13 BET	88-06-2		
Nitrobenzene-d5 (S)	34	%		11/13/05 00:13 BET	4165-60-0		
2-Fluorobiphenyl (S)	30	%		11/13/05 00:13 BET	321-60-8		
Terphenyl-d14 (S)	56	%		11/13/05 00:13 BET	1718-51-0		
Phenol-d5 (S)	33	%		11/13/05 00:13 BET	4165-62-2	1	
2-Fluorophenol (S)	32	%		11/13/05 00:13 BET	367-12-4		
2,4,6-Tribromophenol (S)	42	%		11/13/05 00:13 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	85.	11/09/05 06:04 DLK	67-64-1
Benzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	71-43-2
Bromobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	108-86-1
Bromochloromethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	75-27-4
Bromoform	ND	ug/kg	4.2	11/09/05 06:04 DLK	75-25-2
Bromomethane	ND	ug/kg	8.5	11/09/05 06:04 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	85.	11/09/05 06:04 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	4.2	11/09/05 06:04 DLK	56-23-5
Chlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	108-90-7
Chloroethane	ND	ug/kg	8.5	11/09/05 06:04 DLK	75-00-3
Chloroform	ND	ug/kg	4.2	11/09/05 06:04 DLK	67-66-3
Chloromethane	ND	ug/kg	8.5	11/09/05 06:04 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	4.2	11/09/05 06:04 DLK	95-49-B
4-Chlorotoluene	ND	ug/kg	4.2	11/09/05 06:04 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.2	11/09/05 06:04 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	4.2	11/09/05 06:04 DLK	106-93-4
Dibromomethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	8.5	11/09/05 06:04 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	107-06-2

Date: 11/14/05

Page: 3 of 108

### REPORT OF LABORATORY ANALYSIS

#### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7648

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#### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR87697



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288457  
 Client Sample ID: SB-48-15FT

Project Sample Number: 92106545-001

Matrix: Soil

Date Collected: 10/31/05 09:40

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
1,1-Dichloroethene	ND	ug/kg	4.2	11/09/05 06:04 DLK	75-35-4		
cis-1,2-Dichloroethene	ND	ug/kg	4.2	11/09/05 06:04 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	4.2	11/09/05 06:04 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	4.2	11/09/05 06:04 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	4.2	11/09/05 06:04 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	4.2	11/09/05 06:04 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	4.2	11/09/05 06:04 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	4.2	11/09/05 06:04 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	4.2	11/09/05 06:04 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	4.2	11/09/05 06:04 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	4.2	11/09/05 06:04 DLK	87-68-3		
2-Hexanone	ND	ug/kg	42.	11/09/05 06:04 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	4.2	11/09/05 06:04 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	4.2	11/09/05 06:04 DLK	99-87-6		
Methylene chloride	6.5	ug/kg	4.2	11/09/05 06:04 DLK	75-09-2	2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	42.	11/09/05 06:04 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	4.2	11/09/05 06:04 DLK	1634-04-4		
Naphthalene	ND	ug/kg	4.2	11/09/05 06:04 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	103-65-1		
Styrene	ND	ug/kg	4.2	11/09/05 06:04 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	4.2	11/09/05 06:04 DLK	127-18-4		
Toluene	ND	ug/kg	4.2	11/09/05 06:04 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	79-00-5		
Trichloroethene	ND	ug/kg	4.2	11/09/05 06:04 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	4.2	11/09/05 06:04 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	4.2	11/09/05 06:04 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	4.2	11/09/05 06:04 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	42.	11/09/05 06:04 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	8.5	11/09/05 06:04 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	4.2	11/09/05 06:04 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	8.5	11/09/05 06:04 DLK			
o-Xylene	ND	ug/kg	4.2	11/09/05 06:04 DLK	95-47-6		

Date: 11/14/05

Page: 4 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NEI AD ER7618

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NEI AD ER7629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288457  
 Client Sample ID: SB-48-15FT

Project Sample Number: 92106545-001 Date Collected: 10/31/05 09:40  
 Matrix: Soil Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Toluene-d8 (S)	100	%		11/09/05 06:04 DLK	2037-26-5		
4-Bromofluorobenzene (S)	95	%		11/09/05 06:04 DLK	460-00-4		
Dibromofluoromethane (S)	105	%		11/09/05 06:04 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	98	%		11/09/05 06:04 DLK	17060-07-0		

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR7697



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288499  
 Client Sample ID: SB-49-4FT

Project Sample Number: 92106545-005  
 Matrix: Soil

Date Collected: 10/31/05 11:20  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
<b>Metals</b>							
Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010						
Chromium	10.	mg/kg	0.23	11/10/05 10:03 ALV	7440-47-3		
Lead	32.	mg/kg	0.57	11/10/05 10:03 ALV	7439-92-1		
Date Digested	11/02/05 12:00			11/02/05 12:00			

### Wet Chemistry

Percent Moisture	Method: % Moisture
Percent Moisture	21.6 %

11/02/05 10:42 TNS

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	420	11/13/05 02:36 BET	83-32-9		
Acenaphthylene	ND	ug/kg	420	11/13/05 02:36 BET	208-96-8		
Anthracene	ND	ug/kg	420	11/13/05 02:36 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	420	11/13/05 02:36 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	420	11/13/05 02:36 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	420	11/13/05 02:36 BET	56-55-3		
Benzoic acid	ND	ug/kg	2100	11/13/05 02:36 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	420	11/13/05 02:36 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	840	11/13/05 02:36 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	420	11/13/05 02:36 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	420	11/13/05 02:36 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	420	11/13/05 02:36 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	840	11/13/05 02:36 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	840	11/13/05 02:36 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	420	11/13/05 02:36 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	420	11/13/05 02:36 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	420	11/13/05 02:36 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	420	11/13/05 02:36 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	420	11/13/05 02:36 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	420	11/13/05 02:36 BET	7005-72-3		
Chrysene	ND	ug/kg	420	11/13/05 02:36 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	420	11/13/05 02:36 BET	53-70-3		
Dibenzofuran	ND	ug/kg	420	11/13/05 02:36 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	420	11/13/05 02:36 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	420	11/13/05 02:36 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	420	11/13/05 02:36 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	840	11/13/05 02:36 BET	91-94-1		

Date: 11/14/05

Page: 21 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR7629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288499  
 Client Sample ID: SB-49-4FT

Project Sample Number: 92106545-005  
 Matrix: Soil

Date Collected: 10/31/05 11:20  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dichlorophenol	ND	ug/kg	420	11/13/05 02:36 BET	120-83-2		
Diethylphthalate	ND	ug/kg	420	11/13/05 02:36 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	420	11/13/05 02:36 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	420	11/13/05 02:36 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	420	11/13/05 02:36 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	420	11/13/05 02:36 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2100	11/13/05 02:36 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	420	11/13/05 02:36 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	420	11/13/05 02:36 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	420	11/13/05 02:36 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	420	11/13/05 02:36 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	420	11/13/05 02:36 BET	117-81-7		
Fluoranthene	ND	ug/kg	420	11/13/05 02:36 BET	206-44-0		
Fluorene	ND	ug/kg	420	11/13/05 02:36 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	420	11/13/05 02:36 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	420	11/13/05 02:36 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	420	11/13/05 02:36 BET	77-47-4		
Hexachloroethane	ND	ug/kg	420	11/13/05 02:36 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	420	11/13/05 02:36 BET	193-39-5		
Isophorone	ND	ug/kg	420	11/13/05 02:36 BET	78-59-1		
2-Methylnaphthalene	ND	ug/kg	420	11/13/05 02:36 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	420	11/13/05 02:36 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	420	11/13/05 02:36 BET			
Naphthalene	ND	ug/kg	420	11/13/05 02:36 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2100	11/13/05 02:36 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2100	11/13/05 02:36 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2100	11/13/05 02:36 BET	100-01-6		
Nitrobenzene	ND	ug/kg	420	11/13/05 02:36 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	420	11/13/05 02:36 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2100	11/13/05 02:36 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	420	11/13/05 02:36 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	420	11/13/05 02:36 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2100	11/13/05 02:36 BET	87-86-5		
Phenanthrene	ND	ug/kg	420	11/13/05 02:36 BET	85-01-8		
Phenol	ND	ug/kg	420	11/13/05 02:36 BET	108-95-2		
Pyrene	ND	ug/kg	420	11/13/05 02:36 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	420	11/13/05 02:36 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	420	11/13/05 02:36 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	420	11/13/05 02:36 BET	88-06-2		

Date: 11/14/05

Page: 22 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288499  
 Client Sample ID: SB-49-4FT

Project Sample Number: 92106545-005  
 Matrix: Soil

Date Collected: 10/31/05 11:20  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Nitrobenzene-d5 (S)	67	ppm		11/13/05 02:36 BET	4165-60-0		
2-Fluorobiphenyl (S)	46	ppm		11/13/05 02:36 BET	321-60-8		
Terphenyl-d14 (S)	45	ppm		11/13/05 02:36 BET	1718-51-0		
Phenol-d5 (S)	47	ppm		11/13/05 02:36 BET	4165-62-2		
2-Fluorophenol (S)	12	ppm		11/13/05 02:36 BET	367-12-4		
2,4,6-Tribromophenol (S)	4	ppm		11/13/05 02:36 BET	118-79-6	1	
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	130	11/09/05 06:43 DLK	67-64-1
Benzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	71-43-2
Bromobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	108-86-1
Bromochloromethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	75-27-4
Bromoform	ND	ug/kg	6.5	11/09/05 06:43 DLK	75-25-2
Bromomethane	ND	ug/kg	13.	11/09/05 06:43 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	130	11/09/05 06:43 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	6.5	11/09/05 06:43 DLK	56-23-5
Chlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	108-90-7
Chloroethane	ND	ug/kg	13.	11/09/05 06:43 DLK	75-00-3
Chloroform	ND	ug/kg	6.5	11/09/05 06:43 DLK	67-66-3
Chloromethane	ND	ug/kg	13.	11/09/05 06:43 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	6.5	11/09/05 06:43 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	6.5	11/09/05 06:43 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	6.5	11/09/05 06:43 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	6.5	11/09/05 06:43 DLK	106-93-4
Dibromomethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	13.	11/09/05 06:43 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	107-06-2
1,1-Dichloroethene	ND	ug/kg	6.5	11/09/05 06:43 DLK	75-35-4

Date: 11/14/05

Page: 23 of 108

### REPORT OF LABORATORY ANALYSIS

#### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
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#### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FL NFE AP FR87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288499  
Client Sample ID: SB-49-4FT

Project Sample Number: 92106545-005  
Matrix: Soil

Date Collected: 10/31/05 11:20  
Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
cis-1,2-Dichloroethene	ND	ug/kg	6.5	11/09/05 06:43 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	6.5	11/09/05 06:43 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	6.5	11/09/05 06:43 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	6.5	11/09/05 06:43 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	6.5	11/09/05 06:43 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	6.5	11/09/05 06:43 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	6.5	11/09/05 06:43 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	6.5	11/09/05 06:43 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	6.5	11/09/05 06:43 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	6.5	11/09/05 06:43 DLK	87-68-3		
2-Hexanone	ND	ug/kg	65.	11/09/05 06:43 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	6.5	11/09/05 06:43 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	6.5	11/09/05 06:43 DLK	99-87-6		
Methylene chloride	13.	ug/kg	6.5	11/09/05 06:43 DLK	75-09-2	2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	65.	11/09/05 06:43 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	6.5	11/09/05 06:43 DLK	1634-04-4		
Naphthalene	6.5	ug/kg	6.5	11/09/05 06:43 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	103-65-1		
Styrene	ND	ug/kg	6.5	11/09/05 06:43 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	6.5	11/09/05 06:43 DLK	127-18-4		
Toluene	ND	ug/kg	6.5	11/09/05 06:43 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	79-00-5		
Trichloroethene	ND	ug/kg	6.5	11/09/05 06:43 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	6.5	11/09/05 06:43 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	6.5	11/09/05 06:43 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	6.5	11/09/05 06:43 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	65.	11/09/05 06:43 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	13.	11/09/05 06:43 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	6.5	11/09/05 06:43 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	13.	11/09/05 06:43 DLK			
o-Xylene	ND	ug/kg	6.5	11/09/05 06:43 DLK	95-47-6		
Toluene-d8 (S)	88	%		11/09/05 06:43 DLK	2037-26-5		

Date: 11/14/05

Page: 24 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
NC Drinking Water 37712  
SC Environmental 99030  
FI NELAP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706  
SC 99006  
FI NELAP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288499  
 Client Sample ID: SB-49-4FT

Project Sample Number: 92106545-005  
 Matrix: Soil

Date Collected: 10/31/05 11:20  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
4-Bromofluorobenzene (S)	77	%		11/09/05 06:43 DLK	460-00-4		
Dibromofluoromethane (S)	97	%		11/09/05 06:43 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	80	%		11/09/05 06:43 DLK	17060-07-0		

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NFI AP	F87648

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### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NFI AP	F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288481  
 Client Sample ID: SB-50-8FT

Project Sample Number: 92106545-004  
 Matrix: Soil

Date Collected: 10/31/05 11:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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### Metals

Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010						
Chromium	20.	mg/kg	0.24	11/10/05 09:59 ALV	7440-47-3		
Lead	20.	mg/kg	0.60	11/10/05 09:59 ALV	7439-92-1		
Date Digested	11/02/05 12:00						

### Wet Chemistry

Percent Moisture	Method: % Moisture						
Percent Moisture	16.7	%	11/02/05 10:42 TNS				

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	400	11/13/05 02:00 BET	83-32-9		
Acenaphthylene	ND	ug/kg	400	11/13/05 02:00 BET	208-96-8		
Anthracene	ND	ug/kg	400	11/13/05 02:00 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	400	11/13/05 02:00 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	400	11/13/05 02:00 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	400	11/13/05 02:00 BET	56-55-3		
Benzoic acid	ND	ug/kg	2000	11/13/05 02:00 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	400	11/13/05 02:00 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	790	11/13/05 02:00 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	400	11/13/05 02:00 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	400	11/13/05 02:00 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	400	11/13/05 02:00 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	790	11/13/05 02:00 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	790	11/13/05 02:00 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	400	11/13/05 02:00 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	400	11/13/05 02:00 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	400	11/13/05 02:00 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	400	11/13/05 02:00 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	400	11/13/05 02:00 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	400	11/13/05 02:00 BET	7005-72-3		
Chrysene	ND	ug/kg	400	11/13/05 02:00 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	400	11/13/05 02:00 BET	53-70-3		
Dibenzofuran	500	ug/kg	400	11/13/05 02:00 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	400	11/13/05 02:00 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	400	11/13/05 02:00 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	400	11/13/05 02:00 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	790	11/13/05 02:00 BET	91-94-1		

Date: 11/14/05

Page: 16 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288481  
 Client Sample ID: SB-50-8FT

Project Sample Number: 92106545-004  
 Matrix: Soil

Date Collected: 10/31/05 11:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dichlorophenol	ND	ug/kg	400	11/13/05 02:00 BET	120-83-2		
Diethylphthalate	ND	ug/kg	400	11/13/05 02:00 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	400	11/13/05 02:00 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	400	11/13/05 02:00 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	400	11/13/05 02:00 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	400	11/13/05 02:00 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	2000	11/13/05 02:00 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	400	11/13/05 02:00 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	400	11/13/05 02:00 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	400	11/13/05 02:00 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	400	11/13/05 02:00 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	400	11/13/05 02:00 BET	117-81-7		
Fluoranthene	ND	ug/kg	400	11/13/05 02:00 BET	206-44-0		
Fluorene	1200	ug/kg	400	11/13/05 02:00 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	400	11/13/05 02:00 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	400	11/13/05 02:00 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	400	11/13/05 02:00 BET	77-47-4		
Hexachloroethane	ND	ug/kg	400	11/13/05 02:00 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	400	11/13/05 02:00 BET	193-39-5		
Isophorone	ND	ug/kg	400	11/13/05 02:00 BET	78-59-1		
2-Methylnaphthalene	11000	ug/kg	400	11/13/05 02:00 BET	91-57-6	4	
2-Methylphenol (o-Cresol)	ND	ug/kg	400	11/13/05 02:00 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	400	11/13/05 02:00 BET			
Naphthalene	1400	ug/kg	400	11/13/05 02:00 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	2000	11/13/05 02:00 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	2000	11/13/05 02:00 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	2000	11/13/05 02:00 BET	100-01-6		
Nitrobenzene	ND	ug/kg	400	11/13/05 02:00 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	400	11/13/05 02:00 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	2000	11/13/05 02:00 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	400	11/13/05 02:00 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	400	11/13/05 02:00 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	2000	11/13/05 02:00 BET	87-86-5		
Phenanthrene	2100	ug/kg	400	11/13/05 02:00 BET	85-01-8		
Phenol	ND	ug/kg	400	11/13/05 02:00 BET	108-95-2		
Pyrene	ND	ug/kg	400	11/13/05 02:00 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	400	11/13/05 02:00 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	400	11/13/05 02:00 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	400	11/13/05 02:00 BET	88-06-2		

Date: 11/14/05

Page: 17 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NEI AD F87618

### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NEI AD F87629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288481  
Client Sample ID: SB-50-8FT

Project Sample Number: 92106545-004

Date Collected: 10/31/05 11:00

Matrix: Soil

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Nitrobenzene-d5 (S)	30	‰		11/13/05 02:00 BET	4165-60-0		
2-Fluorobiphenyl (S)	68	‰		11/13/05 02:00 BET	321-60-8		
Terphenyl-d14 (S)	95	‰		11/13/05 02:00 BET	1718-51-0		
Phenol-d5 (S)	49	‰		11/13/05 02:00 BET	4165-62-2		
2-Fluorophenol (S)	26	‰		11/13/05 02:00 BET	367-12-4		
2,4,6-Tribromophenol (S)	19	‰		11/13/05 02:00 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	5000	11/09/05 11:15 DLK	67-64-1
Benzene	ND	ug/kg	250	11/09/05 11:15 DLK	71-43-2
Bromobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	108-86-1
Bromochloromethane	ND	ug/kg	250	11/09/05 11:15 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	250	11/09/05 11:15 DLK	75-27-4
Bromoform	ND	ug/kg	250	11/09/05 11:15 DLK	75-25-2
Bromomethane	ND	ug/kg	500	11/09/05 11:15 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	5000	11/09/05 11:15 DLK	78-93-3
n-Butylbenzene	1200	ug/kg	250	11/09/05 11:15 DLK	104-51-8
sec-Butylbenzene	1400	ug/kg	250	11/09/05 11:15 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	250	11/09/05 11:15 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	250	11/09/05 11:15 DLK	56-23-5
Chlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	108-90-7
Chloroethane	ND	ug/kg	500	11/09/05 11:15 DLK	75-00-3
Chloroform	ND	ug/kg	250	11/09/05 11:15 DLK	67-66-3
Chloromethane	ND	ug/kg	500	11/09/05 11:15 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	250	11/09/05 11:15 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	250	11/09/05 11:15 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	250	11/09/05 11:15 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	250	11/09/05 11:15 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	250	11/09/05 11:15 DLK	106-93-4
Dibromomethane	ND	ug/kg	250	11/09/05 11:15 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	500	11/09/05 11:15 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	107-06-2
1,1-Dichloroethene	ND	ug/kg	250	11/09/05 11:15 DLK	75-35-4

Date: 11/14/05

Page: 18 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
NC Drinking Water 37712  
SC Environmental 99030  
EI NEI AD F976A1

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### Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706  
SC 99006  
EI NEI AD F976A2



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288481  
 Client Sample ID: SB-50-8FT

Project Sample Number: 92106545-004  
 Matrix: Soil

Date Collected: 10/31/05 11:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
cis-1,2-Dichloroethene	ND	ug/kg	250	11/09/05 11:15 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	250	11/09/05 11:15 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	250	11/09/05 11:15 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	250	11/09/05 11:15 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	250	11/09/05 11:15 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	250	11/09/05 11:15 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	250	11/09/05 11:15 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	250	11/09/05 11:15 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	250	11/09/05 11:15 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	250	11/09/05 11:15 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	250	11/09/05 11:15 DLK	87-68-3		
2-Hexanone	ND	ug/kg	2500	11/09/05 11:15 DLK	591-78-6		
Isopropylbenzene (Cumene)	680	ug/kg	250	11/09/05 11:15 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	250	11/09/05 11:15 DLK	99-87-6		
Methylene chloride	400	ug/kg	250	11/09/05 11:15 DLK	75-09-2	2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	2500	11/09/05 11:15 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	250	11/09/05 11:15 DLK	1634-04-4		
Naphthalene	8700	ug/kg	250	11/09/05 11:15 DLK	91-20-3		
n-Propylbenzene	1300	ug/kg	250	11/09/05 11:15 DLK	103-65-1		
Styrene	ND	ug/kg	250	11/09/05 11:15 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	250	11/09/05 11:15 DLK	127-18-4		
Toluene	ND	ug/kg	250	11/09/05 11:15 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	250	11/09/05 11:15 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	250	11/09/05 11:15 DLK	79-00-5		
Trichloroethene	ND	ug/kg	250	11/09/05 11:15 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	250	11/09/05 11:15 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	250	11/09/05 11:15 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	250	11/09/05 11:15 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	250	11/09/05 11:15 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	2500	11/09/05 11:15 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	500	11/09/05 11:15 DLK	75-01-4		
Xylene (Total)	56.	ug/kg	5.0	11/09/05 11:15 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	500	11/09/05 11:15 DLK			
o-Xylene	ND	ug/kg	250	11/09/05 11:15 DLK	95-47-6		
Toluene-d8 (S)	101	%		11/09/05 11:15 DLK	2037-26-5		

Date: 11/14/05

Page: 19 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288481  
 Client Sample ID: SB-50-8FT

Project Sample Number: 92106545-004  
 Matrix: Soil

Date Collected: 10/31/05 11:00  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
4-Bromofluorobenzene (S)	95	%		11/09/05 11:15 DLK	460-00-4		
Dibromofluoromethane (S)	113	%		11/09/05 11:15 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	108	%		11/09/05 11:15 DLK	17060-07-0		

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 SC Environmental 99030  
 FI NFI AP F87648

Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288507  
 Client Sample ID: SB-56-8FT

Project Sample Number: 92106545-006  
 Matrix: Soil

Date Collected: 10/31/05 11:30  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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### Metals

Metals, Trace ICP	Prep/Method: EPA 3050 / EPA 6010						
Chromium	12.	mg/kg	0.22	11/10/05 10:07 ALV	7440-47-3		
Lead	51.	mg/kg	0.54	11/10/05 10:07 ALV	7439-92-1		
Date Digested	11/02/05 12:00						
	11/02/05 12:00						

### Wet Chemistry

Percent Moisture	Method: % Moisture						
Percent Moisture	13.3	%	11/02/05 10:43 TNS				

### GC/MS Semivolatiles

Semivolatile Organics	Prep/Method: EPA 3545 / EPA 8270						
Acenaphthene	ND	ug/kg	380	11/13/05 03:11 BET	83-32-9		
Acenaphthylene	ND	ug/kg	380	11/13/05 03:11 BET	208-96-8		
Anthracene	ND	ug/kg	380	11/13/05 03:11 BET	120-12-7		
Benzo(k)fluoranthene	ND	ug/kg	380	11/13/05 03:11 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/kg	380	11/13/05 03:11 BET	205-99-2		
Benzo(a)anthracene	ND	ug/kg	380	11/13/05 03:11 BET	56-55-3		
Benzoic acid	ND	ug/kg	1900	11/13/05 03:11 BET	65-85-0		
Benzo(g,h,i)perylene	ND	ug/kg	380	11/13/05 03:11 BET	191-24-2		
Benzyl alcohol	ND	ug/kg	760	11/13/05 03:11 BET	100-51-6		
Benzo(a)pyrene	ND	ug/kg	380	11/13/05 03:11 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/kg	380	11/13/05 03:11 BET	101-55-3		
Butylbenzylphthalate	ND	ug/kg	380	11/13/05 03:11 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/kg	760	11/13/05 03:11 BET	59-50-7		
4-Chloroaniline	ND	ug/kg	760	11/13/05 03:11 BET	106-47-8		
bis(2-Chloroethoxy)methane	ND	ug/kg	380	11/13/05 03:11 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/kg	380	11/13/05 03:11 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/kg	380	11/13/05 03:11 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/kg	380	11/13/05 03:11 BET	91-58-7		
2-Chlorophenol	ND	ug/kg	380	11/13/05 03:11 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/kg	380	11/13/05 03:11 BET	7005-72-3		
Chrysene	ND	ug/kg	380	11/13/05 03:11 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/kg	380	11/13/05 03:11 BET	53-70-3		
Dibenzofuran	ND	ug/kg	380	11/13/05 03:11 BET	132-64-9		
1,2-Dichlorobenzene	ND	ug/kg	380	11/13/05 03:11 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/kg	380	11/13/05 03:11 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/kg	380	11/13/05 03:11 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/kg	760	11/13/05 03:11 BET	91-94-1		

Date: 11/14/05

Page: 26 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NEI AD ER7649

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NEI AD ER7629

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288507  
 Client Sample ID: SB-56-8FT

Project Sample Number: 92106545-006  
 Matrix: Soil

Date Collected: 10/31/05 11:30  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dichlorophenol	ND	ug/kg	380	11/13/05 03:11 BET	120-83-2		
Diethylphthalate	ND	ug/kg	380	11/13/05 03:11 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/kg	380	11/13/05 03:11 BET	105-67-9		
Dimethylphthalate	ND	ug/kg	380	11/13/05 03:11 BET	131-11-3		
Di-n-butylphthalate	ND	ug/kg	380	11/13/05 03:11 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/kg	380	11/13/05 03:11 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/kg	1900	11/13/05 03:11 BET	51-28-5		
2,4-Dinitrotoluene	ND	ug/kg	380	11/13/05 03:11 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/kg	380	11/13/05 03:11 BET	606-20-2		
Di-n-octylphthalate	ND	ug/kg	380	11/13/05 03:11 BET	117-84-0		
1,2-Diphenylhydrazine	ND	ug/kg	380	11/13/05 03:11 BET	122-66-7		
bis(2-Ethylhexyl)phthalate	ND	ug/kg	380	11/13/05 03:11 BET	117-81-7		
Fluoranthene	ND	ug/kg	380	11/13/05 03:11 BET	206-44-0		
Fluorene	ND	ug/kg	380	11/13/05 03:11 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/kg	380	11/13/05 03:11 BET	87-68-3		
Hexachlorobenzene	ND	ug/kg	380	11/13/05 03:11 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/kg	380	11/13/05 03:11 BET	77-47-4		
Hexachloroethane	ND	ug/kg	380	11/13/05 03:11 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/kg	380	11/13/05 03:11 BET	193-39-5		
Isophorone	ND	ug/kg	380	11/13/05 03:11 BET	78-59-1		
2-Methylnaphthalene	ND	ug/kg	380	11/13/05 03:11 BET	91-57-6		
2-Methylphenol (o-Cresol)	ND	ug/kg	380	11/13/05 03:11 BET	95-48-7		
3&4-Methylphenol	ND	ug/kg	380	11/13/05 03:11 BET			
Naphthalene	ND	ug/kg	380	11/13/05 03:11 BET	91-20-3		
2-Nitroaniline	ND	ug/kg	1900	11/13/05 03:11 BET	88-74-4		
3-Nitroaniline	ND	ug/kg	1900	11/13/05 03:11 BET	99-09-2		
4-Nitroaniline	ND	ug/kg	1900	11/13/05 03:11 BET	100-01-6		
Nitrobenzene	ND	ug/kg	380	11/13/05 03:11 BET	98-95-3		
2-Nitrophenol	ND	ug/kg	380	11/13/05 03:11 BET	88-75-5		
4-Nitrophenol	ND	ug/kg	1900	11/13/05 03:11 BET	100-02-7		
N-Nitroso-di-n-propylamine	ND	ug/kg	380	11/13/05 03:11 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/kg	380	11/13/05 03:11 BET	86-30-6		
Pentachlorophenol	ND	ug/kg	1900	11/13/05 03:11 BET	87-86-5		
Phenanthrene	ND	ug/kg	380	11/13/05 03:11 BET	85-01-8		
Phenol	ND	ug/kg	380	11/13/05 03:11 BET	108-95-2		
Pyrene	ND	ug/kg	380	11/13/05 03:11 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/kg	380	11/13/05 03:11 BET	120-82-1		
2,4,5-Trichlorophenol	ND	ug/kg	380	11/13/05 03:11 BET	95-95-4		
2,4,6-Trichlorophenol	ND	ug/kg	380	11/13/05 03:11 BET	88-06-2		

Date: 11/14/05

Page: 27 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NFI AP	FR7648

### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NFI AP	FR7627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288507  
 Client Sample ID: SB-56-8FT

Project Sample Number: 92106545-006  
 Matrix: Soil

Date Collected: 10/31/05 11:30  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Nitrobenzene-d5 (S)	37	%		11/13/05 03:11 BET	4165-60-0		
2-Fluorobiphenyl (S)	46	%		11/13/05 03:11 BET	321-60-8		
Terphenyl-d14 (S)	80	%		11/13/05 03:11 BET	1718-51-0		
Phenol-d5 (S)	59	%		11/13/05 03:11 BET	4165-62-2		
2-Fluorophenol (S)	55	%		11/13/05 03:11 BET	367-12-4		
2,4,6-Tribromophenol (S)	60	%		11/13/05 03:11 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC/MS Volatiles

GC/MS VOCs 5035/8260 low level Method: EPA 8260

Acetone	ND	ug/kg	83.	11/09/05 10:36 DLK	67-64-1
Benzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	71-43-2
Bromobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	108-86-1
Bromochloromethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	74-97-5
Bromodichloromethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	75-27-4
Bromoform	ND	ug/kg	4.1	11/09/05 10:36 DLK	75-25-2
Bromomethane	ND	ug/kg	8.3	11/09/05 10:36 DLK	74-83-9
2-Butanone (MEK)	ND	ug/kg	83.	11/09/05 10:36 DLK	78-93-3
n-Butylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	104-51-8
sec-Butylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	135-98-8
tert-Butylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	98-06-6
Carbon tetrachloride	ND	ug/kg	4.1	11/09/05 10:36 DLK	56-23-5
Chlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	108-90-7
Chloroethane	ND	ug/kg	8.3	11/09/05 10:36 DLK	75-00-3
Chloroform	ND	ug/kg	4.1	11/09/05 10:36 DLK	67-66-3
Chloromethane	ND	ug/kg	8.3	11/09/05 10:36 DLK	74-87-3
2-Chlorotoluene	ND	ug/kg	4.1	11/09/05 10:36 DLK	95-49-8
4-Chlorotoluene	ND	ug/kg	4.1	11/09/05 10:36 DLK	106-43-4
1,2-Dibromo-3-chloropropane	ND	ug/kg	4.1	11/09/05 10:36 DLK	96-12-8
Dibromochloromethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	124-48-1
1,2-Dibromoethane (EDB)	ND	ug/kg	4.1	11/09/05 10:36 DLK	106-93-4
Dibromomethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	74-95-3
1,2-Dichlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	95-50-1
1,3-Dichlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	541-73-1
1,4-Dichlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	106-46-7
Dichlorodifluoromethane	ND	ug/kg	8.3	11/09/05 10:36 DLK	75-71-8
1,1-Dichloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	75-34-3
1,2-Dichloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	107-06-2
1,1-Dichloroethene	ND	ug/kg	4.1	11/09/05 10:36 DLK	75-35-4

Date: 11/14/05

Page: 28 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NEI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NEI AP F87629



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288507  
 Client Sample ID: SB-56-8FT

Project Sample Number: 92106545-006

Date Collected: 10/31/05 11:30

Matrix: Soil

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
cis-1,2-Dichloroethene	ND	ug/kg	4.1	11/09/05 10:36 DLK	156-59-2		
trans-1,2-Dichloroethene	ND	ug/kg	4.1	11/09/05 10:36 DLK	156-60-5		
1,2-Dichloropropane	ND	ug/kg	4.1	11/09/05 10:36 DLK	78-87-5		
1,3-Dichloropropane	ND	ug/kg	4.1	11/09/05 10:36 DLK	142-28-9		
2,2-Dichloropropane	ND	ug/kg	4.1	11/09/05 10:36 DLK	594-20-7		
1,1-Dichloropropene	ND	ug/kg	4.1	11/09/05 10:36 DLK	563-58-6		
cis-1,3-Dichloropropene	ND	ug/kg	4.1	11/09/05 10:36 DLK	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/kg	4.1	11/09/05 10:36 DLK	10061-02-6		
Diisopropyl ether	ND	ug/kg	4.1	11/09/05 10:36 DLK	108-20-3		
Ethylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/kg	4.1	11/09/05 10:36 DLK	87-68-3		
2-Hexanone	ND	ug/kg	41.	11/09/05 10:36 DLK	591-78-6		
Isopropylbenzene (Cumene)	ND	ug/kg	4.1	11/09/05 10:36 DLK	98-82-8		
p-Isopropyltoluene	ND	ug/kg	4.1	11/09/05 10:36 DLK	99-87-6		
Methylene chloride	12.	ug/kg	4.1	11/09/05 10:36 DLK	75-09-2	2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	41.	11/09/05 10:36 DLK	108-10-1		
Methyl-tert-butyl ether	ND	ug/kg	4.1	11/09/05 10:36 DLK	1634-04-4		
Naphthalene	ND	ug/kg	4.1	11/09/05 10:36 DLK	91-20-3		
n-Propylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	103-65-1		
Styrene	ND	ug/kg	4.1	11/09/05 10:36 DLK	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	79-34-5		
Tetrachloroethene	ND	ug/kg	4.1	11/09/05 10:36 DLK	127-18-4		
Toluene	ND	ug/kg	4.1	11/09/05 10:36 DLK	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	120-82-1		
1,1,1-Trichloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	71-55-6		
1,1,2-Trichloroethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	79-00-5		
Trichloroethene	ND	ug/kg	4.1	11/09/05 10:36 DLK	79-01-6		
Trichlorofluoromethane	ND	ug/kg	4.1	11/09/05 10:36 DLK	75-69-4		
1,2,3-Trichloropropane	ND	ug/kg	4.1	11/09/05 10:36 DLK	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/kg	4.1	11/09/05 10:36 DLK	108-67-8		
Vinyl acetate	ND	ug/kg	41.	11/09/05 10:36 DLK	108-05-4		
Vinyl chloride	ND	ug/kg	8.3	11/09/05 10:36 DLK	75-01-4		
Xylene (Total)	ND	ug/kg	4.1	11/09/05 10:36 DLK	1330-20-7		
m&p-Xylene	ND	ug/kg	8.3	11/09/05 10:36 DLK			
o-Xylene	ND	ug/kg	4.1	11/09/05 10:36 DLK	95-47-6		
Toluene-d8 (S)	91	%		11/09/05 10:36 DLK	2037-26-5		

Date: 11/14/05

Page: 29 of 108

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP FR7649

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP FR7627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288507  
 Client Sample ID: SB-56-8FT

Project Sample Number: 92106545-006

Date Collected: 10/31/05 11:30

Matrix: Soil

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
4-Bromofluorobenzene (S)	77	%		11/09/05 10:36 DLK	460-00-4		
Dibromofluoromethane (S)	111	%		11/09/05 10:36 DLK	1868-53-7		
1,2-Dichloroethane-d4 (S)	99	%		11/09/05 10:36 DLK	17060-07-0		

## REPORT OF LABORATORY ANALYSIS

### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 FI NFI AP F87648

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### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 FI NFI AP F87629

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288564  
 Client Sample ID: SB-50-GW

Project Sample Number: 92106545-012

Date Collected: 10/31/05 11:45

Matrix: Water

Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
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### Metals

3030C Metals, ICP, Trace	Prep/Method: SM 3030C / EPA 200.7						
Chromium, 3030C	0.76	mg/l	0.0020	11/03/05 14:08 ALV	7440-47-3		
Lead, 3030C	3.6	mg/l	0.0050	11/03/05 14:08 ALV	7439-92-1		
Date Digested	11/02/05 07:15						

### GC/MS Semivolatiles

Extractables in Water by 625	Prep/Method: EPA 625 SF / EPA 625						
Acenaphthene	33.	ug/l	6.2	11/08/05 23:53 BET	83-32-9		
Acenaphthylene	7.2	ug/l	6.2	11/08/05 23:53 BET	208-96-8		
Anthracene	10.	ug/l	6.2	11/08/05 23:53 BET	120-12-7		
Benzidine	ND	ug/l	62.	11/08/05 23:53 BET	92-87-5		
Benzo(k)fluoranthene	ND	ug/l	6.2	11/08/05 23:53 BET	207-08-9		
Benzo(b)fluoranthene	ND	ug/l	6.2	11/08/05 23:53 BET	205-99-2		
Benzo(a)anthracene	ND	ug/l	6.2	11/08/05 23:53 BET	56-55-3		
Benzo(g,h,i)perylene	ND	ug/l	6.2	11/08/05 23:53 BET	191-24-2		
Benzo(a)pyrene	ND	ug/l	6.2	11/08/05 23:53 BET	50-32-8		
4-Bromophenylphenyl ether	ND	ug/l	6.2	11/08/05 23:53 BET	101-55-3		
Butylbenzylphthalate	ND	ug/l	6.2	11/08/05 23:53 BET	85-68-7		
4-Chloro-3-methylphenol	ND	ug/l	6.2	11/08/05 23:53 BET	59-50-7		
bis(2-Chloroethoxy)methane	ND	ug/l	6.2	11/08/05 23:53 BET	111-91-1		
bis(2-Chloroethyl) ether	ND	ug/l	6.2	11/08/05 23:53 BET	111-44-4		
bis(2-Chloroisopropyl) ether	ND	ug/l	6.2	11/08/05 23:53 BET	39638-32-9		
2-Chloronaphthalene	ND	ug/l	6.2	11/08/05 23:53 BET	91-58-7		
2-Chlorophenol	ND	ug/l	6.2	11/08/05 23:53 BET	95-57-8		
4-Chlorophenylphenyl ether	ND	ug/l	6.2	11/08/05 23:53 BET	7005-72-3		
Chrysene	ND	ug/l	6.2	11/08/05 23:53 BET	218-01-9		
Dibenz(a,h)anthracene	ND	ug/l	6.2	11/08/05 23:53 BET	53-70-3		
1,2-Dichlorobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	106-46-7		
3,3'-Dichlorobenzidine	ND	ug/l	12.	11/08/05 23:53 BET	91-94-1		
2,4-Dichlorophenol	ND	ug/l	6.2	11/08/05 23:53 BET	120-83-2		
Diethylphthalate	ND	ug/l	6.2	11/08/05 23:53 BET	84-66-2		
2,4-Dimethylphenol	ND	ug/l	6.2	11/08/05 23:53 BET	105-67-9		
Dimethylphthalate	ND	ug/l	6.2	11/08/05 23:53 BET	131-11-3		
Di-n-butylphthalate	14.	ug/l	6.2	11/08/05 23:53 BET	84-74-2		
4,6-Dinitro-2-methylphenol	ND	ug/l	31.	11/08/05 23:53 BET	534-52-1		
2,4-Dinitrophenol	ND	ug/l	31.	11/08/05 23:53 BET	51-28-5		

Date: 11/14/05

Page: 56 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
FI NEI AD	ER76148

### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
FI NEI AD	ER76297



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288564  
 Client Sample ID: SB-50-GW

Project Sample Number: 92106545-012  
 Matrix: Water

Date Collected: 10/31/05 11:45  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
2,4-Dinitrotoluene	ND	ug/l	6.2	11/08/05 23:53 BET	121-14-2		
2,6-Dinitrotoluene	ND	ug/l	6.2	11/08/05 23:53 BET	606-20-2		
Di-n-octylphthalate	ND	ug/l	6.2	11/08/05 23:53 BET	117-84-0		
bis(2-Ethylhexyl)phthalate	ND	ug/l	6.2	11/08/05 23:53 BET	117-81-7		
Fluoranthene	11.	ug/l	6.2	11/08/05 23:53 BET	206-44-0		
Fluorene	42.	ug/l	6.2	11/08/05 23:53 BET	86-73-7		
Hexachloro-1,3-butadiene	ND	ug/l	6.2	11/08/05 23:53 BET	87-68-3		
Hexachlorobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	118-74-1		
Hexachlorocyclopentadiene	ND	ug/l	12.	11/08/05 23:53 BET	77-47-4		
Hexachloroethane	ND	ug/l	6.2	11/08/05 23:53 BET	67-72-1		
Indeno(1,2,3-cd)pyrene	ND	ug/l	6.2	11/08/05 23:53 BET	193-39-5		
Isophorone	ND	ug/l	6.2	11/08/05 23:53 BET	78-59-1		
Naphthalene	ND	ug/l	6.2	11/08/05 23:53 BET	91-20-3		
Nitrobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	98-95-3		
2-Nitrophenol	ND	ug/l	6.2	11/08/05 23:53 BET	88-75-5		
4-Nitrophenol	ND	ug/l	31.	11/08/05 23:53 BET	100-02-7		
N-Nitrosodimethylamine	ND	ug/l	6.2	11/08/05 23:53 BET	62-75-9		
N-Nitroso-di-n-propylamine	ND	ug/l	6.2	11/08/05 23:53 BET	621-64-7		
N-Nitrosodiphenylamine	ND	ug/l	6.2	11/08/05 23:53 BET	86-30-6		
Pentachlorophenol	ND	ug/l	31.	11/08/05 23:53 BET	87-86-5		
Phenanthrene	41.	ug/l	6.2	11/08/05 23:53 BET	85-01-8		
Phenol	ND	ug/l	6.2	11/08/05 23:53 BET	108-95-2		
Pyrene	14.	ug/l	6.2	11/08/05 23:53 BET	129-00-0		
1,2,4-Trichlorobenzene	ND	ug/l	6.2	11/08/05 23:53 BET	120-82-1		
2,4,6-Trichlorophenol	ND	ug/l	6.2	11/08/05 23:53 BET	88-06-2		
Nitrobenzene-d5 (S)	50	%		11/08/05 23:53 BET	4165-60-0		
2-Fluorobiphenyl (S)	84	%		11/08/05 23:53 BET	321-60-8		
Terphenyl-d14 (S)	104	%		11/08/05 23:53 BET	1718-51-0		
Phenol-d5 (S)	37	%		11/08/05 23:53 BET	4165-62-2		
2-Fluorophenol (S)	52	%		11/08/05 23:53 BET	367-12-4		
2,4,6-Tribromophenol (S)	64	%		11/08/05 23:53 BET	118-79-6		
Date Extracted	11/07/05			11/07/05			

### GC Volatiles

Halogen. & Aromatic Vol. Orgs. Method: EPA 8021

Benzene	ND	ug/l	5.0	11/08/05 02:32 PPM	71-43-2
Bromobenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	108-86-1
Bromochloromethane	ND	ug/l	5.0	11/08/05 02:32 PPM	74-97-5
Bromodichloromethane	ND	ug/l	5.0	11/08/05 02:32 PPM	75-27-4

Date: 11/14/05

Page: 57 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater	40
NC Drinking Water	37712
SC Environmental	99030
EL NEI AD	F97618

### Charlotte Certification IDs

NC Wastewater	12
NC Drinking Water	37706
SC	99006
EL NEI AD	F97627



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288564  
 Client Sample ID: SB-50-GW

Project Sample Number: 92106545-012  
 Matrix: Water

Date Collected: 10/31/05 11:45  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
Bromoform	ND	ug/l	5.0	11/08/05 02:32 PPM	75-25-2		
Bromomethane	ND	ug/l	5.0	11/08/05 02:32 PPM	74-83-9		
n-Butylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	104-51-8		
sec-Butylbenzene	10.	ug/l	5.0	11/08/05 02:32 PPM	135-98-8		
tert-Butylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	98-06-6		
Carbon tetrachloride	8.2	ug/l	5.0	11/08/05 02:32 PPM	56-23-5		
Chlorobenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	108-90-7		
Chloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	75-00-3		
Chloroform	8.9	ug/l	5.0	11/08/05 02:32 PPM	67-66-3		
Chloromethane	ND	ug/l	10.	11/08/05 02:32 PPM	74-87-3		
2-Chlorotoluene	ND	ug/l	5.0	11/08/05 02:32 PPM	95-49-8		
4-Chlorotoluene	ND	ug/l	5.0	11/08/05 02:32 PPM	106-43-4		
1,2-Dibromo-3-chloropropane	ND	ug/l	10.	11/08/05 02:32 PPM	96-12-8		
Dibromochloromethane	ND	ug/l	5.0	11/08/05 02:32 PPM	124-48-1		
1,2-Dibromoethane (EDB)	ND	ug/l	5.0	11/08/05 02:32 PPM	106-93-4		
Dibromomethane	ND	ug/l	5.0	11/08/05 02:32 PPM	74-95-3		
1,2-Dichlorobenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	95-50-1		
1,3-Dichlorobenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	541-73-1		
1,4-Dichlorobenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	106-46-7		
Dichlorodifluoromethane	ND	ug/l	5.0	11/08/05 02:32 PPM	75-71-8	5	
1,1-Dichloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	75-34-3		
1,2-Dichloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	107-06-2		
1,1-Dichloroethene	ND	ug/l	5.0	11/08/05 02:32 PPM	75-35-4		
cis-1,2-Dichloroethene	ND	ug/l	5.0	11/08/05 02:32 PPM	156-59-2		
trans-1,2-Dichloroethene	ND	ug/l	5.0	11/08/05 02:32 PPM	156-60-5		
1,2-Dichloropropane	ND	ug/l	5.0	11/08/05 02:32 PPM	78-87-5		
1,3-Dichloropropane	ND	ug/l	5.0	11/08/05 02:32 PPM	142-28-9		
2,2-Dichloropropane	ND	ug/l	5.0	11/08/05 02:32 PPM	594-20-7		
1,1-Dichloropropene	ND	ug/l	5.0	11/08/05 02:32 PPM	563-58-6		
cis-1,3-Dichloropropene	ND	ug/l	5.0	11/08/05 02:32 PPM	10061-01-5		
trans-1,3-Dichloropropene	ND	ug/l	5.0	11/08/05 02:32 PPM	10061-02-6		
Diisopropyl ether	ND	ug/l	5.0	11/08/05 02:32 PPM	108-20-3		
Ethylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	100-41-4		
Hexachloro-1,3-butadiene	ND	ug/l	10.	11/08/05 02:32 PPM	87-68-3		
Isopropylbenzene (Cumene)	ND	ug/l	5.0	11/08/05 02:32 PPM	98-82-8		
p-Isopropyltoluene	ND	ug/l	5.0	11/08/05 02:32 PPM	99-87-6		
Methylene chloride	ND	ug/l	10.	11/08/05 02:32 PPM	75-09-2		
Methyl-tert-butyl ether	ND	ug/l	5.0	11/08/05 02:32 PPM	1634-04-4		
Naphthalene	71.	ug/l	10.	11/08/05 02:32 PPM	91-20-3		

Date: 11/14/05

Page: 58 of 108

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### Asheville Certification IDs

NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NELAP E07640

### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NELAP E07607



Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

Lab Sample No: 926288564  
 Client Sample ID: SB-50-GW

Project Sample Number: 92106545-012

Date Collected: 10/31/05 11:45  
 Date Received: 11/01/05 17:46

Parameters	Results	Units	Report Limit	Analyzed By	CAS No.	Qual	RegLmt
n-Propylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	103-65-1		
Styrene	ND	ug/l	5.0	11/08/05 02:32 PPM	100-42-5		
1,1,1,2-Tetrachloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	630-20-6		
1,1,2,2-Tetrachloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	79-34-5		
Tetrachloroethene	ND	ug/l	5.0	11/08/05 02:32 PPM	127-18-4		
Toluene	ND	ug/l	5.0	11/08/05 02:32 PPM	108-88-3		
1,2,3-Trichlorobenzene	ND	ug/l	10.	11/08/05 02:32 PPM	87-61-6		
1,2,4-Trichlorobenzene	ND	ug/l	10.	11/08/05 02:32 PPM	120-82-1		
1,1,1-Trichloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	71-55-6		
1,1,2-Trichloroethane	ND	ug/l	5.0	11/08/05 02:32 PPM	79-00-5		
Trichloroethene	ND	ug/l	5.0	11/08/05 02:32 PPM	79-01-6		
Trichlorofluoromethane	ND	ug/l	5.0	11/08/05 02:32 PPM	75-69-4		
1,2,3-Trichloropropane	ND	ug/l	5.0	11/08/05 02:32 PPM	96-18-4		
1,2,4-Trimethylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	95-63-6		
1,3,5-Trimethylbenzene	ND	ug/l	5.0	11/08/05 02:32 PPM	108-67-8		
Vinyl chloride	ND	ug/l	5.0	11/08/05 02:32 PPM	75-01-4		
Xylene (Total)	ND	ug/l	1.0	11/08/05 02:32 PPM	1330-20-7		
m&p-Xylene	ND	ug/l	5.0	11/08/05 02:32 PPM			
o-Xylene	ND	ug/l	5.0	11/08/05 02:32 PPM	95-47-6		
1-Chloro-3-fluorobenzene (S)	100	%		11/08/05 02:32 PPM	625-98-9		

## REPORT OF LABORATORY ANALYSIS

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NC Wastewater 40  
 NC Drinking Water 37712  
 SC Environmental 99030  
 EI NELAD E97619

### Charlotte Certification IDs

NC Wastewater 12  
 NC Drinking Water 37706  
 SC 99006  
 EI NELAD E97607





**Pace Analytical Services, Inc.**  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

November 14, 2005

Ms. Lori Hamburg  
General Eng. Consultants  
PO Box 14262  
Research Triangle Pk, NC 27709

RE: Lab Project Number: 92106545  
Client Project ID: MultiModal Rail/WBS#32179

Dear Ms. Hamburg:

Enclosed are the analytical results for sample(s) received by the laboratory on November 1, 2005. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

Inorganic Wet Chemistry and Metals Analyses were performed at our Pace Asheville laboratory and Organic testing was performed at our Pace Charlotte laboratory unless otherwise footnoted.

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

Sincerely,

A handwritten signature in black ink that reads "Annette Scott".

Annette Scott  
Annette.Scott@pacelabs.com  
Project Manager

Enclosures

## REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

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## PARAMETER FOOTNOTES

Method 9071B modified to use ASE.

All pH, Free Chlorine, Total Chlorine and Ferrous Iron analyses conducted outside of EPA recommended immediate hold time.

Depending on the moisture content the PRLs can be elevated for all soil samples reported on a dry weight basis.

2-Chloroethyl vinyl ether has been shown to degrade in the presence of acid.

ND Not detected at or above adjusted reporting limit

NC Not Calculable

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

MDL Adjusted Method Detection Limit

(S) Surrogate

[1] Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of the two remaining acid surrogates.

[2] Common laboratory contaminant.

[3] Low surrogate recovery was confirmed as a matrix effect by a second analysis.

[4] Compound concentration exceeds the calibration range of the instrument (CLP E-Flag).

[5] Sample was received by the laboratory without acid preservation as recommended by the US EPA.

## REPORT OF LABORATORY ANALYSIS



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kinney Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 141733 Analysis Method: EPA 8021  
QC Batch Method: EPA 8021 Analysis Description: Halogen. & Aromatic Vol. Orgs.  
Associated Lab Samples: 926288564

METHOD BLANK: 926296948  
Associated Lab Samples: 926288564

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Benzene	ug/l	ND	1.0	
Bromobenzene	ug/l	ND	1.0	
Bromochloromethane	ug/l	ND	1.0	
Bromodichloromethane	ug/l	ND	1.0	
Bromoform	ug/l	ND	1.0	
Bromomethane	ug/l	ND	1.0	
n-Butylbenzene	ug/l	ND	1.0	
sec-Butylbenzene	ug/l	ND	1.0	
tert-Butylbenzene	ug/l	ND	1.0	
Carbon tetrachloride	ug/l	ND	1.0	
Chlorobenzene	ug/l	ND	1.0	
Chloroethane	ug/l	ND	1.0	
Chloroform	ug/l	ND	1.0	
Chloromethane	ug/l	ND	2.0	
2-Chlorotoluene	ug/l	ND	1.0	
4-Chlorotoluene	ug/l	ND	1.0	
1,2-Dibromo-3-chloropropane	ug/l	ND	2.0	
Dibromochloromethane	ug/l	ND	1.0	
1,2-Dibromoethane (EDB)	ug/l	ND	1.0	
Dibromomethane	ug/l	ND	1.0	
1,2-Dichlorobenzene	ug/l	ND	1.0	
1,3-Dichlorobenzene	ug/l	ND	1.0	
1,4-Dichlorobenzene	ug/l	ND	1.0	
Dichlorodifluoromethane	ug/l	ND	1.0	
1,1-Dichloroethane	ug/l	ND	1.0	
1,2-Dichloroethane	ug/l	ND	1.0	
1,1-Dichloroethene	ug/l	ND	1.0	
cis-1,2-Dichloroethene	ug/l	ND	1.0	
trans-1,2-Dichloroethene	ug/l	ND	1.0	
1,2-Dichloropropane	ug/l	ND	1.0	
1,3-Dichloropropane	ug/l	ND	1.0	

Date: 11/14/05

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Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926296948

Associated Lab Samples: 926288564

Parameter	Units	Blank Result	Reporting Limit	Footnotes
2,2-Dichloropropane	ug/l	ND	1.0	
1,1-Dichloropropene	ug/l	ND	1.0	
cis-1,3-Dichloropropene	ug/l	ND	1.0	
trans-1,3-Dichloropropene	ug/l	ND	1.0	
Diisopropyl ether	ug/l	ND	1.0	
Ethylbenzene	ug/l	ND	1.0	
Hexachloro-1,3-butadiene	ug/l	ND	2.0	
Isopropylbenzene (Cumene)	ug/l	ND	1.0	
p-Isopropyltoluene	ug/l	ND	1.0	
Methylene chloride	ug/l	ND	2.0	
Methyl-tert-butyl ether	ug/l	ND	1.0	
Naphthalene	ug/l	ND	2.0	
n-Propylbenzene	ug/l	ND	1.0	
Styrene	ug/l	ND	1.0	
1,1,1,2-Tetrachloroethane	ug/l	ND	1.0	
1,1,2,2-Tetrachloroethane	ug/l	ND	1.0	
Tetrachloroethene	ug/l	ND	1.0	
Toluene	ug/l	ND	1.0	
1,2,3-Trichlorobenzene	ug/l	ND	2.0	
1,2,4-Trichlorobenzene	ug/l	ND	2.0	
1,1,1-Trichloroethane	ug/l	ND	1.0	
1,1,2-Trichloroethane	ug/l	ND	1.0	
Trichloroethene	ug/l	ND	1.0	
Trichlorofluoromethane	ug/l	ND	1.0	
1,2,3-Trichloropropane	ug/l	ND	1.0	
1,2,4-Trimethylbenzene	ug/l	ND	1.0	
1,3,5-Trimethylbenzene	ug/l	ND	1.0	
Vinyl chloride	ug/l	ND	1.0	
Xylene (Total)	ug/l	ND	1.0	
m&p-Xylene	ug/l	ND	1.0	
o-Xylene	ug/l	ND	1.0	
1-Chloro-3-fluorobenzene (S)	%	105		

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## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926296955

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Benzene	ug/l	20.00	20.61	103	
Bromobenzene	ug/l	20.00	22.00	110	
Bromochloromethane	ug/l	20.00	21.37	107	
Bromodichloromethane	ug/l	20.00	20.46	102	
Bromoform	ug/l	20.00	22.13	111	
Bromomethane	ug/l	20.00	36.95	185 1	
n-Butylbenzene	ug/l	20.00	20.10	101	
sec-Butylbenzene	ug/l	20.00	22.29	111	
tert-Butylbenzene	ug/l	20.00	20.35	102	
Carbon tetrachloride	ug/l	20.00	23.52	118	
Chlorobenzene	ug/l	20.00	21.61	108	
Chloroethane	ug/l	20.00	23.95	120	
Chloroform	ug/l	20.00	17.80	89	
Chloromethane	ug/l	20.00	20.34	102	
2-Chlorotoluene	ug/l	20.00	23.85	119	
4-Chlorotoluene	ug/l	20.00	20.83	104	
1,2-Dibromo-3-chloropropane	ug/l	20.00	23.88	119	
Dibromochloromethane	ug/l	20.00	23.67	118	
1,2-Dibromoethane (EDB)	ug/l	20.00	21.56	108	
Dibromomethane	ug/l	20.00	19.63	98	
1,2-Dichlorobenzene	ug/l	20.00	20.94	105	
1,3-Dichlorobenzene	ug/l	20.00	19.58	98	
1,4-Dichlorobenzene	ug/l	20.00	20.41	102	
Dichlorodifluoromethane	ug/l	20.00	24.28	121	
1,1-Dichloroethane	ug/l	20.00	24.13	121	
1,2-Dichloroethane	ug/l	20.00	19.24	96	
1,1-Dichloroethene	ug/l	20.00	23.73	119	
cis-1,2-Dichloroethene	ug/l	20.00	22.66	113	
trans-1,2-Dichloroethene	ug/l	20.00	24.01	120	
1,2-Dichloropropane	ug/l	20.00	21.83	109	
1,3-Dichloropropane	ug/l	20.00	20.92	105	
2,2-Dichloropropane	ug/l	20.00	24.88	124	
1,1-Dichloropropene	ug/l	20.00	24.42	122	
cis-1,3-Dichloropropene	ug/l	20.00	21.42	107	
trans-1,3-Dichloropropene	ug/l	20.00	23.15	116	
Diisopropyl ether	ug/l	20.00	18.90	94	
Ethylbenzene	ug/l	20.00	20.11	101	

Date: 11/14/05

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## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926296955

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Hexachloro-1,3-butadiene	ug/l	20.00	22.34	112	
Isopropylbenzene (Cumene)	ug/l	20.00	20.09	100	
p-Isopropyltoluene	ug/l	20.00	20.51	103	
Methylene chloride	ug/l	20.00	23.00	115	
Methyl-tert-butyl ether	ug/l	20.00	17.43	87	
Naphthalene	ug/l	20.00	17.10	86	
n-Propylbenzene	ug/l	20.00	21.36	107	
Styrene	ug/l	20.00	21.14	106	
1,1,1,2-Tetrachloroethane	ug/l	20.00	23.81	119	
1,1,2,2-Tetrachloroethane	ug/l	20.00	22.50	113	
Tetrachloroethene	ug/l	20.00	24.07	120	
Toluene	ug/l	20.00	20.74	104	
1,2,3-Trichlorobenzene	ug/l	20.00	19.92	100	
1,2,4-Trichlorobenzene	ug/l	20.00	22.94	115	
1,1,1-Trichloroethane	ug/l	20.00	25.07	125	
1,1,2-Trichloroethane	ug/l	20.00	20.40	102	
Trichloroethene	ug/l	20.00	22.41	112	
Trichlorofluoromethane	ug/l	20.00	25.84	129	
1,2,3-Trichloropropane	ug/l	20.00	22.38	112	
1,2,4-Trimethylbenzene	ug/l	20.00	19.61	98	
1,3,5-Trimethylbenzene	ug/l	20.00	19.65	98	
Vinyl chloride	ug/l	20.00	26.34	132	
Xylene (Total)	ug/l	60.00	59.91	100	
m&p-Xylene	ug/l	40.00	38.93	97	
o-Xylene	ug/l	20.00	20.98	105	
1-Chloro-3-fluorobenzene (S)				100	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926296963 926296971

Parameter	Units	926284696 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Benzene	ug/l	3.540	20.00	23.71	23.61	101	100	0	
Chlorobenzene	ug/l	0	20.00	18.17	18.07	91	90	1	
Toluene	ug/l	27.54	20.00	47.98	47.38	102	99	1	
1-Chloro-3-fluorobenzene (S)						98	98		

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## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926296989

<u>Parameter</u>	<u>Units</u>	926284704		<u>RPD</u>	<u>Footnotes</u>
		<u>Result</u>	DUP <u>Result</u>		
Benzene	ug/l	6.500	6.500	1	
Bromobenzene	ug/l	ND	ND	NC	
n-Butylbenzene	ug/l	ND	ND	NC	
sec-Butylbenzene	ug/l	ND	ND	NC	
tert-Butylbenzene	ug/l	ND	ND	NC	
Chlorobenzene	ug/l	ND	ND	NC	
1,2-Dichlorobenzene	ug/l	ND	ND	NC	
1,3-Dichlorobenzene	ug/l	ND	ND	NC	
1,4-Dichlorobenzene	ug/l	ND	ND	NC	
Diisopropyl ether	ug/l	ND	ND	NC	
Ethylbenzene	ug/l	3.100	3.200	0	
Isopropylbenzene (Cumene)	ug/l	ND	ND	NC	
p-Isopropyltoluene	ug/l	ND	ND	NC	
Methyl-tert-butyl ether	ug/l	7.400	7.400	1	
Naphthalene	ug/l	ND	ND	NC	
n-Propylbenzene	ug/l	ND	ND	NC	
Styrene	ug/l	ND	ND	NC	
Toluene	ug/l	11.00	11.00	2	
1,2,4-Trimethylbenzene	ug/l	ND	ND	NC	
1,3,5-Trimethylbenzene	ug/l	ND	ND	NC	
Xylene (Total)	ug/l	8.400	8.400	0	
m&p-Xylene	ug/l	7.300	7.300	0	
o-Xylene	ug/l	1.100	1.100	3	
1-Chloro-3-fluorobenzene (S)	%	95	95		

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 2005-11-14-00000

Charlotte Certification IDs  
 NC Wastewater 12  
 NC Drinking Water 37706  
 2005-11-14-00000



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9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 140209 Analysis Method: EPA 625

QC Batch Method: EPA 625 SF Analysis Description: Extractables in Water by 625

Associated Lab Samples: 926288564

METHOD BLANK: 926312380

Associated Lab Samples: 926288564

Parameter	Units	Blank	Reporting	Footnotes
		Result	Limit	
Acenaphthene	ug/l	ND	5.0	
Acenaphthylene	ug/l	ND	5.0	
Anthracene	ug/l	ND	5.0	
Benzidine	ug/l	ND	50.	
Benzo(k)fluoranthene	ug/l	ND	5.0	
Benzo(b)fluoranthene	ug/l	ND	5.0	
Benzo(a)anthracene	ug/l	ND	5.0	
Benzo(g,h,i)perylene	ug/l	ND	5.0	
Benzo(a)pyrene	ug/l	ND	5.0	
4-Bromophenylphenyl ether	ug/l	ND	5.0	
Butylbenzylphthalate	ug/l	ND	5.0	
4-Chloro-3-methylphenol	ug/l	ND	5.0	
bis(2-Chloroethoxy)methane	ug/l	ND	5.0	
bis(2-Chloroethyl) ether	ug/l	ND	5.0	
bis(2-Chloroisopropyl) ether	ug/l	ND	5.0	
2-Chloronaphthalene	ug/l	ND	5.0	
2-Chlorophenol	ug/l	ND	5.0	
4-Chlorophenylphenyl ether	ug/l	ND	5.0	
Chrysene	ug/l	ND	5.0	
Dibenz(a,h)anthracene	ug/l	ND	5.0	
1,2-Dichlorobenzene	ug/l	ND	5.0	
1,3-Dichlorobenzene	ug/l	ND	5.0	
1,4-Dichlorobenzene	ug/l	ND	5.0	
3,3'-Dichlorobenzidine	ug/l	ND	10.	
2,4-Dichlorophenol	ug/l	ND	5.0	
Diethylphthalate	ug/l	ND	5.0	
2,4-Dimethylphenol	ug/l	ND	5.0	
Dimethylphthalate	ug/l	ND	5.0	
Di-n-butylphthalate	ug/l	ND	5.0	
4,6-Dinitro-2-methylphenol	ug/l	ND	25.	
2,4-Dinitrophenol	ug/l	ND	25.	

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## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926312380

Associated Lab Samples: 926288564

Parameter	Units	Blank Result	Reporting Limit	Footnotes
2,4-Dinitrotoluene	ug/l	ND	5.0	
2,6-Dinitrotoluene	ug/l	ND	5.0	
Di-n-octylphthalate	ug/l	ND	5.0	
bis(2-Ethylhexyl)phthalate	ug/l	ND	5.0	
Fluoranthene	ug/l	ND	5.0	
Fluorene	ug/l	ND	5.0	
Hexachloro-1,3-butadiene	ug/l	ND	5.0	
Hexachlorobenzene	ug/l	ND	5.0	
Hexachlorocyclopentadiene	ug/l	ND	10.	
Hexachloroethane	ug/l	ND	5.0	
Indeno(1,2,3-cd)pyrene	ug/l	ND	5.0	
Isophorone	ug/l	ND	5.0	
Naphthalene	ug/l	ND	5.0	
Nitrobenzene	ug/l	ND	5.0	
2-Nitrophenol	ug/l	ND	5.0	
4-Nitrophenol	ug/l	ND	25.	
N-Nitrosodimethylamine	ug/l	ND	5.0	
N-Nitroso-di-n-propylamine	ug/l	ND	5.0	
N-Nitrosodiphenylamine	ug/l	ND	5.0	
Pentachlorophenol	ug/l	ND	25.	
Phenanthrene	ug/l	ND	5.0	
Phenol	ug/l	ND	5.0	
Pyrene	ug/l	ND	5.0	
1,2,4-Trichlorobenzene	ug/l	ND	5.0	
2,4,6-Trichlorophenol	ug/l	ND	5.0	
Nitrobenzene-d5 (S)	%	58		
2-Fluorobiphenyl (S)	%	63		
Terphenyl-d14 (S)	%	82		
Phenol-d5 (S)	%	24		
2-Fluorophenol (S)	%	35		
2,4,6-Tribromophenol (S)	%	91		

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Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926225483

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Acenaphthene	ug/l	50.00	34.66	69	
Acenaphthylene	ug/l	50.00	33.85	68	
Anthracene	ug/l	50.00	38.64	77	
Benzidine	ug/l	100.00	6.598	7 2	
Benzo(k)fluoranthene	ug/l	50.00	29.70	59	
Benzo(b)fluoranthene	ug/l	50.00	33.24	66	
Benzo(a)anthracene	ug/l	50.00	36.20	72	
Benzo(g,h,i)perylene	ug/l	50.00	40.96	82	
Benzo(a)pyrene	ug/l	50.00	35.23	70	
4-Bromophenylphenyl ether	ug/l	50.00	40.84	82	
Butylbenzylphthalate	ug/l	50.00	37.58	75	
4-Chloro-3-methylphenol	ug/l	50.00	42.09	84	
bis(2-Chloroethoxy)methane	ug/l	50.00	38.96	78	
bis(2-Chloroethyl) ether	ug/l	50.00	29.67	59	
bis(2-Chloroisopropyl) ether	ug/l	50.00	31.10	62	
2-Chloronaphthalene	ug/l	50.00	35.27	70	
2-Chlorophenol	ug/l	50.00	30.71	61	
4-Chlorophenylphenyl ether	ug/l	50.00	38.21	76	
Chrysene	ug/l	50.00	36.97	74	
Dibenz(a,h)anthracene	ug/l	50.00	43.62	87	
1,2-Dichlorobenzene	ug/l	50.00	22.10	44	
1,3-Dichlorobenzene	ug/l	50.00	18.28	37	
1,4-Dichlorobenzene	ug/l	50.00	19.43	39	
3,3'-Dichlorobenzidine	ug/l	100.00	43.93	44	
2,4-Dichlorophenol	ug/l	50.00	41.69	83	
Diethylphthalate	ug/l	50.00	37.69	75	
2,4-Dimethylphenol	ug/l	50.00	40.56	81	
Dimethylphthalate	ug/l	50.00	38.28	77	
Di-n-butylphthalate	ug/l	50.00	38.99	78	
4,6-Dinitro-2-methylphenol	ug/l	50.00	42.29	85	
2,4-Dinitrophenol	ug/l	50.00	33.83	68	
2,4-Dinitrotoluene	ug/l	50.00	35.20	70	
2,6-Dinitrotoluene	ug/l	50.00	40.55	81	
Di-n-octylphthalate	ug/l	50.00	38.80	78	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	37.76	76	
Fluoranthene	ug/l	50.00	35.27	70	
Fluorene	ug/l	50.00	35.20	70	

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Page: 68 of 108

REPORT OF LABORATORY ANALYSIS

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Asheville Certification IDs  
NC Wastewater 40  
NC Drinking Water 37712

Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706

## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926225483

<u>Parameter</u>	<u>Units</u>	Spike Conc.	LCS Result	% Rec	<u>Footnotes</u>
Hexachloro-1,3-butadiene	ug/l	50.00	17.24	34	
Hexachlorobenzene	ug/l	50.00	41.65	83	
Hexachlorocyclopentadiene	ug/l	50.00	15.88	32	
Hexachloroethane	ug/l	50.00	12.84	26	2
Indeno(1,2,3-cd)pyrene	ug/l	50.00	40.76	82	
Isophorone	ug/l	50.00	81.95	164	
Naphthalene	ug/l	50.00	31.13	62	
Nitrobenzene	ug/l	50.00	35.77	72	
2-Nitrophenol	ug/l	50.00	38.60	77	
4-Nitrophenol	ug/l	50.00	16.98	34	
N-Nitrosodimethylamine	ug/l	50.00	16.49	33	
N-Nitroso-di-n-propylamine	ug/l	50.00	38.15	76	
N-Nitrosodiphenylamine	ug/l	50.00	43.16	86	
Pentachlorophenol	ug/l	50.00	39.59	79	
Phenanthrene	ug/l	50.00	35.94	72	
Phenol	ug/l	50.00	15.03	30	
Pyrene	ug/l	50.00	34.71	69	
1,2,4-Trichlorobenzene	ug/l	50.00	28.60	57	
2,4,6-Trichlorophenol	ug/l	50.00	40.60	81	
Nitrobenzene-d5 (S)				75	
2-Fluorobiphenyl (S)				75	
Terphenyl-d14 (S)				82	
Phenol-d5 (S)				28	
2-Fluorophenol (S)				38	
2,4,6-Tribromophenol (S)				105	

LABORATORY CONTROL SAMPLE: 926233339

<u>Parameter</u>	<u>Units</u>	Spike Conc.	LCS Result	% Rec	<u>Footnotes</u>
Acenaphthene	ug/l	50.00	33.90	68	
Acenaphthylene	ug/l	50.00	33.92	68	
Anthracene	ug/l	50.00	39.39	79	
Benzidine	ug/l	100.00	5.477	5	2
Benzo(k)fluoranthene	ug/l	50.00	30.86	62	
Benzo(b)fluoranthene	ug/l	50.00	30.20	60	

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926233339

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Benzo(a)anthracene	ug/l	50.00	34.68	69	
Benzo(g,h,i)perylene	ug/l	50.00	40.83	82	
Benzo(a)pyrene	ug/l	50.00	35.69	71	
4-Bromophenylphenyl ether	ug/l	50.00	39.69	79	
Butylbenzylphthalate	ug/l	50.00	42.24	84	
4-Chloro-3-methylphenol	ug/l	50.00	41.54	83	
bis(2-Chloroethoxy)methane	ug/l	50.00	33.38	67	
bis(2-Chloroethyl) ether	ug/l	50.00	23.73	48	
bis(2-Chloroisopropyl) ether	ug/l	50.00	24.62	49	
2-Chloronaphthalene	ug/l	50.00	33.23	66	
2-Chlorophenol	ug/l	50.00	25.52	51	
4-Chlorophenylphenyl ether	ug/l	50.00	35.89	72	
Chrysene	ug/l	50.00	36.75	74	
Dibenz(a,h)anthracene	ug/l	50.00	43.27	86	
1,2-Dichlorobenzene	ug/l	50.00	21.24	42	
1,3-Dichlorobenzene	ug/l	50.00	19.21	38	
1,4-Dichlorobenzene	ug/l	50.00	20.74	42	
3,3'-Dichlorobenzidine	ug/l	100.00	42.91	43	
2,4-Dichlorophenol	ug/l	50.00	37.63	75	
Diethylphthalate	ug/l	50.00	37.21	74	
2,4-Dimethylphenol	ug/l	50.00	37.91	76	
Dimethylphthalate	ug/l	50.00	37.59	75	
Di-n-butylphthalate	ug/l	50.00	40.88	82	
4,6-Dinitro-2-methylphenol	ug/l	50.00	37.36	75	
2,4-Dinitrophenol	ug/l	50.00	29.96	60	
2,4-Dinitrotoluene	ug/l	50.00	34.95	70	
2,6-Dinitrotoluene	ug/l	50.00	39.75	80	
Di-n-octylphthalate	ug/l	50.00	43.23	86	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	43.46	87	
Fluoranthene	ug/l	50.00	33.24	66	
Fluorene	ug/l	50.00	34.95	70	
Hexachloro-1,3-butadiene	ug/l	50.00	19.87	40	
Hexachlorobenzene	ug/l	50.00	42.12	84	
Hexachlorocyclopentadiene	ug/l	50.00	26.30	53	
Hexachloroethane	ug/l	50.00	17.67	35	2
Indeno(1,2,3-cd)pyrene	ug/l	50.00	40.71	81	
Isophorone	ug/l	50.00	78.68	157	

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Page: 70 of 108

## REPORT OF LABORATORY ANALYSIS

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Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
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Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926233339

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Naphthalene	ug/l	50.00	27.00	54	
Nitrobenzene	ug/l	50.00	29.64	59	
2-Nitrophenol	ug/l	50.00	32.91	66	
4-Nitrophenol	ug/l	50.00	18.93	38	
N-Nitrosodimethylamine	ug/l	50.00	13.61	27	
N-Nitroso-di-n-propylamine	ug/l	50.00	31.83	64	
N-Nitrosodiphenylamine	ug/l	50.00	44.60	89	
Pentachlorophenol	ug/l	50.00	36.64	73	
Phenanthrene	ug/l	50.00	36.65	73	
Phenol	ug/l	50.00	14.34	29	
Pyrene	ug/l	50.00	37.18	74	
1,2,4-Trichlorobenzene	ug/l	50.00	24.97	50	
2,4,6-Trichlorophenol	ug/l	50.00	37.66	75	
Nitrobenzene-d5 (S)				59	
2-Fluorobiphenyl (S)				64	
Terphenyl-d14 (S)				76	
Phenol-d5 (S)				26	
2-Fluorophenol (S)				33	
2,4,6-Tribromophenol (S)				95	

LABORATORY CONTROL SAMPLE: 926312398

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Acenaphthene	ug/l	50.00	24.45	49	
Acenaphthylene	ug/l	50.00	23.38	47	
Anthracene	ug/l	50.00	28.10	56	
Benzidine	ug/l	100.00	0	0	2
Benzo(k)fluoranthene	ug/l	50.00	25.33	51	
Benzo(b)fluoranthene	ug/l	50.00	26.20	52	
Benzo(a)anthracene	ug/l	50.00	28.25	56	
Benzo(g,h,i)perylene	ug/l	50.00	27.61	55	
Benzo(a)pyrene	ug/l	50.00	28.42	57	
4-Bromophenylphenyl ether	ug/l	50.00	29.37	59	
Butylbenzylphthalate	ug/l	50.00	27.41	55	
4-Chloro-3-methylphenol	ug/l	50.00	29.11	58	

Date: 11/14/05

Page: 71 of 108

## REPORT OF LABORATORY ANALYSIS

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## Asheville Certification IDs

NC Wastewater 40  
NC Drinking Water 37712  
37712

## Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706  
37706

## QUALITY CONTROL DATA

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926312398

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
bis(2-Chloroethoxy)methane	ug/l	50.00	21.30	43	
bis(2-Chloroethyl) ether	ug/l	50.00	17.87	36	
bis(2-Chloroisopropyl) ether	ug/l	50.00	18.89	38	
2-Chloronaphthalene	ug/l	50.00	23.49	47 2	
2-Chlorophenol	ug/l	50.00	17.64	35	
4-Chlorophenylphenyl ether	ug/l	50.00	27.48	55	
Chrysene	ug/l	50.00	28.42	57	
Dibenz(a,h)anthracene	ug/l	50.00	30.40	61	
1,2-Dichlorobenzene	ug/l	50.00	13.43	27 2	
1,3-Dichlorobenzene	ug/l	50.00	12.01	24	
1,4-Dichlorobenzene	ug/l	50.00	13.10	26	
3,3'-Dichlorobenzidine	ug/l	100.00	18.28	18	
2,4-Dichlorophenol	ug/l	50.00	25.22	50	
Diethylphthalate	ug/l	50.00	28.58	57	
2,4-Dimethylphenol	ug/l	50.00	26.46	53	
Dimethylphthalate	ug/l	50.00	27.56	55	
Di-n-butylphthalate	ug/l	50.00	28.21	56	
4,6-Dinitro-2-methylphenol	ug/l	50.00	29.68	59	
2,4-Dinitrophenol	ug/l	50.00	22.56	45	
2,4-Dinitrotoluene	ug/l	50.00	25.72	51	
2,6-Dinitrotoluene	ug/l	50.00	28.62	57	
Di-n-octylphthalate	ug/l	50.00	26.51	53	
bis(2-Ethylhexyl)phthalate	ug/l	50.00	28.03	56	
Fluoranthene	ug/l	50.00	26.48	53	
Fluorene	ug/l	50.00	25.72	51	
Hexachloro-1,3-butadiene	ug/l	50.00	15.30	31	
Hexachlorobenzene	ug/l	50.00	30.22	60	
Hexachlorocyclopentadiene	ug/l	50.00	21.87	44	
Hexachloroethane	ug/l	50.00	11.98	24 2	
Indeno(1,2,3-cd)pyrene	ug/l	50.00	28.27	56	
Isophorone	ug/l	50.00	54.99	110	
Naphthalene	ug/l	50.00	18.23	36	
Nitrobenzene	ug/l	50.00	21.15	42	
2-Nitrophenol	ug/l	50.00	20.01	40	
4-Nitrophenol	ug/l	50.00	14.00	28	
N-Nitrosodimethylamine	ug/l	50.00	9.745	20	
N-Nitroso-di-n-propylamine	ug/l	50.00	24.03	48	

Date: 11/14/05

Page: 72 of 108

## REPORT OF LABORATORY ANALYSIS

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 NC Wastewater 40  
 NC Drinking Water 37712

Charlotte Certification IDs  
 NC Wastewater 12  
 NC Drinking Water 37706

## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
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 Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926312398

<u>Parameter</u>	<u>Units</u>	Spike	LCS	LCS	<u>% Rec</u>	<u>Footnotes</u>
		<u>Conc.</u>	<u>Result</u>	<u>%</u>		
N-Nitrosodiphenylamine	ug/l	50.00	16.66	33		
Pentachlorophenol	ug/l	50.00	33.00	66		
Phenanthrene	ug/l	50.00	26.92	54		
Phenol	ug/l	50.00	9.571	19		
Pyrene	ug/l	50.00	27.78	56		
1,2,4-Trichlorobenzene	ug/l	50.00	17.12	34 2		
2,4,6-Trichlorophenol	ug/l	50.00	29.11	58		
Nitrobenzene-d5 (S)				46		
2-Fluorobiphenyl (S)				54		
Terphenyl-d14 (S)				66		
Phenol-d5 (S)				18		
2-Fluorophenol (S)				25		
2,4,6-Tribromophenol (S)				74		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 926225491 926225509

<u>Parameter</u>	<u>Units</u>	926215500		Spike	MS	MSD	MS	MSD	<u>RPD</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Conc.</u>	<u>Result</u>	<u>Result</u>	<u>% Rec</u>	<u>% Rec</u>	<u>% Rec</u>		
Acenaphthene	ug/l	5.012	100.00	74.55	76.15	70	71	2		
Acenaphthylene	ug/l	0	100.00	65.69	67.81	66	68	3		
Anthracene	ug/l	0	100.00	73.44	75.90	73	76	3		
Benzidine	ug/l	0	200.00	2.185	2.190	1	1	0	2.2	
Benzo(k)fluoranthene	ug/l	0	100.00	60.21	64.90	60	65	8		
Benzo(b)fluoranthene	ug/l	0	100.00	59.46	59.76	60	60	0		
Benzo(a)anthracene	ug/l	0	100.00	66.56	70.47	67	70	6		
Benzo(g,h,i)perylene	ug/l	0	100.00	73.69	77.53	74	78	5		
Benzo(a)pyrene	ug/l	0	100.00	67.03	69.41	67	69	3		
4-Bromophenylphenyl ether	ug/l	0	100.00	71.53	75.27	72	75	5		
Butylbenzylphthalate	ug/l	0	100.00	81.26	85.64	81	86	5		
4-Chloro-3-methylphenol	ug/l	0	100.00	79.46	83.81	80	84	5		
bis(2-Chloroethoxy)methane	ug/l	0	100.00	74.09	80.73	74	81	9		
bis(2-Chloroethyl) ether	ug/l	0	100.00	56.00	60.92	56	61	8		
bis(2-Chloroisopropyl) ether	ug/l	0	100.00	57.98	61.96	58	62	7		
2-Chloronaphthalene	ug/l	0	100.00	66.14	69.08	66	69	4		
2-Chlorophenol	ug/l	0	100.00	58.88	63.64	59	64	8		
4-Chlorophenylphenyl ether	ug/l	0	100.00	65.90	69.07	66	69	5		

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Page: 73 of 108

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 NC Drinking Water 37712

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 NC Drinking Water 37706

## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
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 Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 926225491 926225509

Parameter	Units	926215500 Result	Spike	MS	MSD	MS	MSD	RPD	Footnotes
			Conc.	Result	Result	% Rec	% Rec		
Chrysene	ug/l	0	100.00	68.64	72.38	69	72	5	
Dibenz(a,h)anthracene	ug/l	0	100.00	76.88	82.17	77	82	7	
1,2-Dichlorobenzene	ug/l	0	100.00	38.05	40.79	38	41	7	
1,3-Dichlorobenzene	ug/l	0	100.00	29.49	32.20	30	32	9	
1,4-Dichlorobenzene	ug/l	0	100.00	33.66	35.60	34	36	6	
3,3'-Dichlorobenzidine	ug/l	0	100.00	69.72	64.49	70	64	8	
2,4-Dichlorophenol	ug/l	0	100.00	78.16	83.96	78	84	7	
Diethylphthalate	ug/l	0	100.00	75.26	77.31	75	77	3	
2,4-Dimethylphenol	ug/l	0	100.00	79.28	78.26	79	78	1	
Dimethylphthalate	ug/l	0	100.00	73.67	77.48	74	78	5	
Di-n-butylphthalate	ug/l	2.596	100.00	77.18	83.33	75	81	8	
4,6-Dinitro-2-methylphenol	ug/l	0	100.00	68.88	74.96	69	75	8	
2,4-Dinitrophenol	ug/l	0	100.00	57.12	62.13	57	62	8	
2,4-Dinitrotoluene	ug/l	0	100.00	68.20	69.92	68	70	2	
2,6-Dinitrotoluene	ug/l	0	100.00	78.44	80.80	78	81	3	
Di-n-octylphthalate	ug/l	0	100.00	83.19	85.31	83	85	3	
bis(2-Ethylhexyl)phthalate	ug/l	0	100.00	83.52	87.22	84	87	4	
Fluoranthene	ug/l	0	100.00	65.15	68.24	65	68	5	
Fluorene	ug/l	0	100.00	68.20	69.92	68	70	2	
Hexachloro-1,3-butadiene	ug/l	0	100.00	19.69	24.84	20	25	23	2
Hexachlorobenzene	ug/l	0	100.00	75.14	76.49	75	76	2	
Hexachlorocyclopentadiene	ug/l	0	100.00	25.07	30.10	25	30	18	
Hexachloroethane	ug/l	0	100.00	20.35	20.69	20	21	2	2,2
Indeno(1,2,3-cd)pyrene	ug/l	0	100.00	72.26	76.63	72	77	6	
Isophorone	ug/l	0	100.00	154.9	165.8	155	166	7	
Naphthalene	ug/l	0	100.00	92.08	98.51	92	98	7	
Nitrobenzene	ug/l	0	100.00	67.80	72.59	68	73	7	
2-Nitrophenol	ug/l	0	100.00	74.50	80.38	74	80	8	
4-Nitrophenol	ug/l	0	100.00	33.55	33.41	34	33	0	
N-Nitrosodimethylamine	ug/l	0	100.00	28.76	34.12	29	34	17	
N-Nitroso-di-n-propylamine	ug/l	0	100.00	70.85	74.38	71	74	5	
N-Nitrosodiphenylamine	ug/l	0	100.00	82.60	86.35	83	86	4	
Pentachlorophenol	ug/l	0	100.00	68.41	73.31	68	73	7	
Phenanthrene	ug/l	0	100.00	68.75	71.69	69	72	4	
Phenol	ug/l	0	100.00	28.56	31.03	29	31	8	
Pyrene	ug/l	0	100.00	71.20	74.28	71	74	4	
1,2,4-Trichlorobenzene	ug/l	0	100.00	43.47	49.88	44	50	14	

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Page: 74 of 108

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 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 926225491 926225509

<u>Parameter</u>	<u>Units</u>	926215500	Spike	MS	MSD	MS	MSD	<u>Footnotes</u>
		<u>Result</u>	<u>Conc.</u>	<u>Result</u>	<u>Result</u>	% Rec	% Rec	
2,4,6-Trichlorophenol	ug/l	0	100.00	77.47	80.72	78	81	4
Nitrobenzene-d5 (S)						71	77	
2-Fluorobiphenyl (S)						69	73	
Terphenyl-d14 (S)						82	85	
Phenol-d5 (S)						27	30	
2-Fluorophenol (S)						38	40	
2,4,6-Tribromophenol (S)						100	105	

SAMPLE DUPLICATE: 926225517

<u>Parameter</u>	<u>Units</u>	504975343	DUP	<u>Footnotes</u>
		<u>Result</u>	<u>Result</u>	
Acenaphthene	ug/l	ND	ND	NC
Acenaphthylene	ug/l	ND	ND	NC
Anthracene	ug/l	ND	ND	NC
Benzidine	ug/l	ND	ND	NC
Benzo(k)fluoranthene	ug/l	ND	ND	NC
Benzo(b)fluoranthene	ug/l	ND	ND	NC
Benzo(a)anthracene	ug/l	ND	ND	NC
Benzo(g,h,i)perylene	ug/l	ND	ND	NC
Benzo(a)pyrene	ug/l	ND	ND	NC
4-Bromophenylphenyl ether	ug/l	ND	ND	NC
Butylbenzylphthalate	ug/l	ND	ND	NC
4-Chloro-3-methylphenol	ug/l	ND	ND	NC
bis(2-Chloroethoxy)methane	ug/l	ND	ND	NC
bis(2-Chloroethyl) ether	ug/l	ND	ND	NC
bis(2-Chloroisopropyl) ether	ug/l	ND	ND	NC
2-Chloronaphthalene	ug/l	ND	ND	NC
2-Chlorophenol	ug/l	ND	ND	NC
4-Chlorophenylphenyl ether	ug/l	ND	ND	NC
Chrysene	ug/l	ND	ND	NC
Dibenz(a,h)anthracene	ug/l	ND	ND	NC
1,2-Dichlorobenzene	ug/l	ND	ND	NC
1,3-Dichlorobenzene	ug/l	ND	ND	NC
1,4-Dichlorobenzene	ug/l	ND	ND	NC
3,3'-Dichlorobenzidine	ug/l	ND	ND	NC

Date: 11/14/05

Page: 75 of 108

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## QUALITY CONTROL DATA

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926225517

Parameter	Units	504975343	DUP	RPD	Footnotes
		Result	Result		
2,4-Dichlorophenol	ug/l	ND	ND	NC	
Diethylphthalate	ug/l	ND	ND	NC	
2,4-Dimethylphenol	ug/l	ND	ND	NC	
Dimethylphthalate	ug/l	ND	ND	NC	
Di-n-butylphthalate	ug/l	ND	ND	NC	
4,6-Dinitro-2-methylphenol	ug/l	ND	ND	NC	
2,4-Dinitrophenol	ug/l	ND	ND	NC	
2,4-Dinitrotoluene	ug/l	ND	ND	NC	
2,6-Dinitrotoluene	ug/l	ND	ND	NC	
Di-n-octylphthalate	ug/l	ND	ND	NC	
bis(2-Ethylhexyl)phthalate	ug/l	ND	ND	NC	
Fluoranthene	ug/l	ND	ND	NC	
Fluorene	ug/l	ND	ND	NC	
Hexachloro-1,3-butadiene	ug/l	ND	ND	NC	
Hexachlorobenzene	ug/l	ND	ND	NC	
Hexachlorocyclopentadiene	ug/l	ND	ND	NC	
Hexachloroethane	ug/l	ND	ND	NC	
Indeno(1,2,3-cd)pyrene	ug/l	ND	ND	NC	
Isophorone	ug/l	ND	ND	NC	
Naphthalene	ug/l	ND	ND	NC	
Nitrobenzene	ug/l	ND	ND	NC	
2-Nitrophenol	ug/l	ND	ND	NC	
4-Nitrophenol	ug/l	ND	ND	NC	
N-Nitrosodimethylamine	ug/l	ND	ND	NC	
N-Nitroso-di-n-propylamine	ug/l	ND	ND	NC	
N-Nitrosodiphenylamine	ug/l	ND	ND	NC	
Pentachlorophenol	ug/l	ND	ND	NC	
Phenanthrene	ug/l	ND	ND	NC	
Phenol	ug/l	ND	ND	NC	
Pyrene	ug/l	ND	ND	NC	
1,2,4-Trichlorobenzene	ug/l	ND	ND	NC	
2,4,6-Trichlorophenol	ug/l	ND	ND	NC	
Nitrobenzene-d5 (S)	%	74	74		
2-Fluorobiphenyl (S)	%	69	66		
Terphenyl-d14 (S)	%	96	94		
Phenol-d5 (S)	%	29	69		
2-Fluorophenol (S)	%	26	51		

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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926225517

Parameter	Units	504975343	DUP	Result	Result	RPD	Footnotes
2,4,6-Tribromophenol (S)	%			104	102		

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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 142101 Analysis Method: EPA 8270  
QC Batch Method: EPA 3545 Analysis Description: Semivolatile Organics  
Associated Lab Samples: 926288457 926288465 926288473 926288481 926288499  
926288507

METHOD BLANK: 926312554

Associated Lab Samples: 926288457 926288465 926288473 926288481 926288499 926288507

Parameter	Units	Blank	Reporting	
		Result	Limit	Footnotes
Acenaphthene	ug/kg	ND	330	
Acenaphthylene	ug/kg	ND	330	
Anthracene	ug/kg	ND	330	
Benzo(k)fluoranthene	ug/kg	ND	330	
Benzo(b)fluoranthene	ug/kg	ND	330	
Benzo(a)anthracene	ug/kg	ND	330	
Benzoic acid	ug/kg	ND	1600	
Benzo(g,h,i)perylene	ug/kg	ND	330	
Benzyl alcohol	ug/kg	ND	660	
Benzo(a)pyrene	ug/kg	ND	330	
4-Bromophenylphenyl ether	ug/kg	ND	330	
Butylbenzylphthalate	ug/kg	ND	330	
4-Chloro-3-methylphenol	ug/kg	ND	660	
4-Chloroaniline	ug/kg	ND	660	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	
bis(2-Chloroethyl) ether	ug/kg	ND	330	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	
2-Chloronaphthalene	ug/kg	ND	330	
2-Chlorophenol	ug/kg	ND	330	
4-Chlorophenylphenyl ether	ug/kg	ND	330	
Chrysene	ug/kg	ND	330	
Dibenz(a,h)anthracene	ug/kg	ND	330	
Dibenzofuran	ug/kg	ND	330	
1,2-Dichlorobenzene	ug/kg	ND	330	
1,3-Dichlorobenzene	ug/kg	ND	330	
1,4-Dichlorobenzene	ug/kg	ND	330	
3,3'-Dichlorobenzidine	ug/kg	ND	660	
2,4-Dichlorophenol	ug/kg	ND	330	
Diethylphthalate	ug/kg	ND	330	
2,4-Dimethylphenol	ug/kg	ND	330	

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## QUALITY CONTROL DATA

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926312554

Associated Lab Samples: 926288457    926288465    926288473    926288481    926288499    926288507

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Dimethylphthalate	ug/kg	ND	330	
Di-n-butylphthalate	ug/kg	ND	330	
4,6-Dinitro-2-methylphenol	ug/kg	ND	330	
2,4-Dinitrophenol	ug/kg	ND	1600	
2,4-Dinitrotoluene	ug/kg	ND	330	
2,6-Dinitrotoluene	ug/kg	ND	330	
Di-n-octylphthalate	ug/kg	ND	330	
1,2-Diphenylhydrazine	ug/kg	ND	330	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	
Fluoranthene	ug/kg	ND	330	
Fluorene	ug/kg	ND	330	
Hexachloro-1,3-butadiene	ug/kg	ND	330	
Hexachlorobenzene	ug/kg	ND	330	
Hexachlorocyclopentadiene	ug/kg	ND	330	
Hexachloroethane	ug/kg	ND	330	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	
Isophorone	ug/kg	ND	330	
2-Methylnaphthalene	ug/kg	ND	330	
2-Methylphenol (o-Cresol)	ug/kg	ND	330	
3&4-Methylphenol	ug/kg	ND	330	
Naphthalene	ug/kg	ND	330	
2-Nitroaniline	ug/kg	ND	1600	
3-Nitroaniline	ug/kg	ND	1600	
4-Nitroaniline	ug/kg	ND	1600	
Nitrobenzene	ug/kg	ND	330	
2-Nitrophenol	ug/kg	ND	330	
4-Nitrophenol	ug/kg	ND	1600	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	
N-Nitrosodiphenylamine	ug/kg	ND	330	
Pentachlorophenol	ug/kg	ND	1600	
Phenanthrene	ug/kg	ND	330	
Phenol	ug/kg	ND	330	
Pyrene	ug/kg	ND	330	
1,2,4-Trichlorobenzene	ug/kg	ND	330	
2,4,5-Trichlorophenol	ug/kg	ND	330	
2,4,6-Trichlorophenol	ug/kg	ND	330	

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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926312554

Associated Lab Samples: 926288457 926288465 926288473 926288481 926288499 926288507

Parameter	Units	Blank	Reporting		
		Result	Limit	Footnotes	
Nitrobenzene-d5 (S)	%	71			
2-Fluorobiphenyl (S)	%	70			
Terphenyl-d14 (S)	%	79			
Phenol-d5 (S)	%	70			
2-Fluorophenol (S)	%	67			
2,4,6-Tribromophenol (S)	%	83			

LABORATORY CONTROL SAMPLE: 926312562

Parameter	Units	Spike	LCS	LCS	
		Conc.	Result	% Rec	Footnotes
Acenaphthene	ug/kg	1667.00	1236	74	
Acenaphthylene	ug/kg	1667.00	1244	75	
Anthracene	ug/kg	1667.00	1316	79	
Benzo(k)fluoranthene	ug/kg	1667.00	1217	73	
Benzo(b)fluoranthene	ug/kg	1667.00	1158	70	
Benzo(a)anthracene	ug/kg	1667.00	1296	78	
Benzoic acid	ug/kg	1667.00	175.3	10	
Benzo(g,h,i)perylene	ug/kg	1667.00	1223	73	
Benzyl alcohol	ug/kg	1667.00	1422	85	
Benzo(a)pyrene	ug/kg	1667.00	1294	78	
4-Bromophenylphenyl ether	ug/kg	1667.00	1355	81	
Butylbenzylphthalate	ug/kg	1667.00	1262	76	
4-Chloro-3-methylphenol	ug/kg	1667.00	1459	88	
4-Chloroaniline	ug/kg	1667.00	1001	60	
bis(2-Chloroethoxy)methane	ug/kg	1667.00	1289	77	
bis(2-Chloroethyl) ether	ug/kg	1667.00	1221	73	
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	1291	77	
2-Chloronaphthalene	ug/kg	1667.00	1273	76	
2-Chlorophenol	ug/kg	1667.00	1255	75	
4-Chlorophenylphenyl ether	ug/kg	1667.00	1337	80	
Chrysene	ug/kg	1667.00	1311	79	
Dibenz(a,h)anthracene	ug/kg	1667.00	1373	82	
Dibenzofuran	ug/kg	1667.00	1329	80	
1,2-Dichlorobenzene	ug/kg	1667.00	1213	73	

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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926312562

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
1,3-Dichlorobenzene	ug/kg	1667.00	1178	71	
1,4-Dichlorobenzene	ug/kg	1667.00	1196	72	
3,3'-Dichlorobenzidine	ug/kg	3333.00	1142	34	
2,4-Dichlorophenol	ug/kg	1667.00	1355	81	
Diethylphthalate	ug/kg	1667.00	1344	81	
2,4-Dimethylphenol	ug/kg	1667.00	1397	84	
Dimethylphthalate	ug/kg	1667.00	1335	80	
Di-n-butylphthalate	ug/kg	1667.00	1276	77	
4,6-Dinitro-2-methylphenol	ug/kg	1667.00	1102	66	
2,4-Dinitrophenol	ug/kg	1667.00	816.4	49	
2,4-Dinitrotoluene	ug/kg	1667.00	1247	75	
2,6-Dinitrotoluene	ug/kg	1667.00	1397	84	
Di-n-octylphthalate	ug/kg	1667.00	1223	73	
1,2-Diphenylhydrazine	ug/kg	1667.00	1156	69	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	1268	76	
Fluoranthene	ug/kg	1667.00	1231	74	
Fluorene	ug/kg	1667.00	1247	75	
Hexachloro-1,3-butadiene	ug/kg	1667.00	1398	84	
Hexachlorobenzene	ug/kg	1667.00	1368	82	
Hexachlorocyclopentadiene	ug/kg	1667.00	1248	75	
Hexachloroethane	ug/kg	1667.00	1254	75	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	1255	75	
Isophorone	ug/kg	1667.00	2902	174 1	
2-Methylnaphthalene	ug/kg	1667.00	1283	77	
2-Methylphenol (o-Cresol)	ug/kg	1667.00	1335	80	
3&4-Methylphenol	ug/kg	1667.00	1272	76	
Naphthalene	ug/kg	1667.00	1174	70	
2-Nitroaniline	ug/kg	1667.00	1118	67	
3-Nitroaniline	ug/kg	1667.00	821.9	49	
4-Nitroaniline	ug/kg	1667.00	1271	76	
Nitrobenzene	ug/kg	1667.00	1403	84	
2-Nitrophenol	ug/kg	1667.00	1252	75	
4-Nitrophenol	ug/kg	1667.00	1372	82	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1379	83	
N-Nitrosodiphenylamine	ug/kg	1667.00	1545	93	
Pentachlorophenol	ug/kg	1667.00	1423	85	
Phenanthrene	ug/kg	1667.00	1241	74	

## REPORT OF LABORATORY ANALYSIS



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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926312562

Parameter	Units	Spike	LCS	LCS	% Rec	Footnotes
		Conc.	Result	% Rec		
Phenol	ug/kg	1667.00	1355	81		
Pyrene	ug/kg	1667.00	1266	76		
1,2,4-Trichlorobenzene	ug/kg	1667.00	1314	79		
2,4,5-Trichlorophenol	ug/kg	1667.00	1383	83		
2,4,6-Trichlorophenol	ug/kg	1667.00	1400	84		
Nitrobenzene-d5 (S)			90			
2-Fluorobiphenyl (S)			84			
Terphenyl-d14 (S)			89			
Phenol-d5 (S)			85			
2-Fluorophenol (S)			84			
2,4,6-Tribromophenol (S)			98			

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926312570 926312588

Parameter	Units	926278516	Spike	MS	MSD	MS	MSD	RPD	Footnotes
		Result	Conc.	Result	Result	% Rec	% Rec		
Acenaphthene	ug/kg	0	1873.00	1361	1400	73	75	3	
4-Chloro-3-methylphenol	ug/kg	0	1873.00	1565	1641	84	88	5	
2-Chlorophenol	ug/kg	0	1873.00	1329	1385	71	74	4	
1,4-Dichlorobenzene	ug/kg	0	1873.00	1255	1240	67	66	1	
2,4-Dinitrotoluene	ug/kg	0	1873.00	1374	1410	73	75	3	
4-Nitrophenol	ug/kg	0	1873.00	1574	1636	84	87	4	
N-Nitroso-di-n-propylamine	ug/kg	0	1873.00	1560	1625	83	87	4	
Pentachlorophenol	ug/kg	0	1873.00	1446	1514	77	81	5	
Phenol	ug/kg	0	1873.00	1483	1576	79	84	6	
Pyrene	ug/kg	0	1873.00	1336	1445	71	77	8	
1,2,4-Trichlorobenzene	ug/kg	0	1873.00	1397	1471	75	78	5	
Nitrobenzene-d5 (S)						85	88		
2-Fluorobiphenyl (S)						85	89		
Terphenyl-d14 (S)						85	91		
Phenol-d5 (S)						83	85		
2-Fluorophenol (S)						74	72		
2,4,6-Tribromophenol (S)						82	76		

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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926312596

Parameter	Units	926290123	DUP	RPD	Footnotes
Result	Result				
Acenaphthene	ug/kg	ND	ND	NC	
Acenaphthylene	ug/kg	ND	ND	NC	
Anthracene	ug/kg	ND	ND	NC	
Benzo(a)anthracene	ug/kg	ND	ND	NC	
Benzo(a)pyrene	ug/kg	ND	ND	NC	
Benzo(b)fluoranthene	ug/kg	ND	ND	NC	
Benzo(g,h,i)perylene	ug/kg	ND	ND	NC	
Benzo(k)fluoranthene	ug/kg	ND	ND	NC	
Chrysene	ug/kg	ND	ND	NC	
Dibenz(a,h)anthracene	ug/kg	ND	ND	NC	
Fluoranthene	ug/kg	ND	ND	NC	
Fluorene	ug/kg	ND	ND	NC	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	ND	ND	NC	
Phenanthrene	ug/kg	ND	ND	NC	
Pyrene	ug/kg	ND	ND	NC	
Nitrobenzene-d5 (S)	%	73	64		
2-Fluorobiphenyl (S)	%	68	56		
Terphenyl-d14 (S)	%	46	42		
2-Methylnaphthalene	ug/kg		ND	NC	

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Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 142350 Analysis Method: EPA 8270  
QC Batch Method: EPA 3545 Analysis Description: Semivolatile Organics  
Associated Lab Samples: 926288515 926288523 926288531

METHOD BLANK: 926325440  
Associated Lab Samples: 926288515 926288523 926288531

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Acenaphthene	ug/kg	ND	330	
Acenaphthylene	ug/kg	ND	330	
Anthracene	ug/kg	ND	330	
Benzo(k)fluoranthene	ug/kg	ND	330	
Benzo(b)fluoranthene	ug/kg	ND	330	
Benzo(a)anthracene	ug/kg	ND	330	
Benzoic acid	ug/kg	ND	1600	
Benzo(g,h,i)perylene	ug/kg	ND	330	
Benzyl alcohol	ug/kg	ND	660	
Benzo(a)pyrene	ug/kg	ND	330	
4-Bromophenylphenyl ether	ug/kg	ND	330	
Butylbenzylphthalate	ug/kg	ND	330	
4-Chloro-3-methylphenol	ug/kg	ND	660	
4-Chloroaniline	ug/kg	ND	660	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	
bis(2-Chloroethyl) ether	ug/kg	ND	330	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	
2-Chloronaphthalene	ug/kg	ND	330	
2-Chlorophenol	ug/kg	ND	330	
4-Chlorophenylphenyl ether	ug/kg	ND	330	
Chrysene	ug/kg	ND	330	
Dibenz(a,h)anthracene	ug/kg	ND	330	
Dibenzofuran	ug/kg	ND	330	
1,2-Dichlorobenzene	ug/kg	ND	330	
1,3-Dichlorobenzene	ug/kg	ND	330	
1,4-Dichlorobenzene	ug/kg	ND	330	
3,3'-Dichlorobenzidine	ug/kg	ND	660	
2,4-Dichlorophenol	ug/kg	ND	330	
Diethylphthalate	ug/kg	ND	330	
2,4-Dimethylphenol	ug/kg	ND	330	
Dimethylphthalate	ug/kg	ND	330	

Date: 11/14/05

Page: 84 of 108

## REPORT OF LABORATORY ANALYSIS

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Asheville Certification IDs  
NC Wastewater 40  
NC Drinking Water 37712

Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706

## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926325440  
 Associated Lab Samples: 926288515    926288523    926288531

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Di-n-butylphthalate	ug/kg	ND	330	
4,6-Dinitro-2-methylphenol	ug/kg	ND	330	
2,4-Dinitrophenol	ug/kg	ND	1600	
2,4-Dinitrotoluene	ug/kg	ND	330	
2,6-Dinitrotoluene	ug/kg	ND	330	
Di-n-octylphthalate	ug/kg	ND	330	
1,2-Diphenylhydrazine	ug/kg	ND	330	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	
Fluoranthene	ug/kg	ND	330	
Fluorene	ug/kg	ND	330	
Hexachloro-1,3-butadiene	ug/kg	ND	330	
Hexachlorobenzene	ug/kg	ND	330	
Hexachlorocyclopentadiene	ug/kg	ND	330	
Hexachloroethane	ug/kg	ND	330	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	
Isophorone	ug/kg	ND	330	
2-Methylnaphthalene	ug/kg	ND	330	
2-Methylphenol (o-Cresol)	ug/kg	ND	330	
3&4-Methylphenol	ug/kg	ND	330	
Naphthalene	ug/kg	ND	330	
2-Nitroaniline	ug/kg	ND	1600	
3-Nitroaniline	ug/kg	ND	1600	
4-Nitroaniline	ug/kg	ND	1600	
Nitrobenzene	ug/kg	ND	330	
2-Nitrophenol	ug/kg	ND	330	
4-Nitrophenol	ug/kg	ND	1600	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	
N-Nitrosodiphenylamine	ug/kg	ND	330	
Pentachlorophenol	ug/kg	ND	1600	
Phenanthrene	ug/kg	ND	330	
Phenol	ug/kg	ND	330	
Pyrene	ug/kg	ND	330	
1,2,4-Trichlorobenzene	ug/kg	ND	330	
2,4,5-Trichlorophenol	ug/kg	ND	330	
2,4,6-Trichlorophenol	ug/kg	ND	330	
Nitrobenzene-d5 (S)	%	79		

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Page: 85 of 108

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 NC Drinking Water    37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926325440  
Associated Lab Samples: 926288515 926288523 926288531

Parameter	Units	Blank Result	Reporting Limit	Footnotes
2-Fluorobiphenyl (S)	%	68		
Terphenyl-d14 (S)	%	83		
Phenol-d5 (S)	%	74		
2-Fluorophenol (S)	%	70		
2,4,6-Tribromophenol (S)	%	84		

LABORATORY CONTROL SAMPLE: 926325457

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Acenaphthene	ug/kg	1667.00	1246	75	
Acenaphthylene	ug/kg	1667.00	1245	75	
Anthracene	ug/kg	1667.00	1334	80	
Benzo(k)fluoranthene	ug/kg	1667.00	1302	78	
Benzo(b)fluoranthene	ug/kg	1667.00	1251	75	
Benzo(a)anthracene	ug/kg	1667.00	1307	78	
Benzoic acid	ug/kg	1667.00	564.0	34	
Benzo(g,h,i)perylene	ug/kg	1667.00	675.2	40	
Benzyl alcohol	ug/kg	1667.00	1450	87	
Benzo(a)pyrene	ug/kg	1667.00	1341	80	
4-Bromophenylphenyl ether	ug/kg	1667.00	1351	81	
Butylbenzylphthalate	ug/kg	1667.00	1265	76	
4-Chloro-3-methylphenol	ug/kg	1667.00	1518	91	
4-Chloroaniline	ug/kg	1667.00	1223	73	
bis(2-Chloroethoxy)methane	ug/kg	1667.00	1318	79	
bis(2-Chloroethyl) ether	ug/kg	1667.00	1197	72	
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	1292	78	
2-Chloronaphthalene	ug/kg	1667.00	1286	77	
2-Chlorophenol	ug/kg	1667.00	1195	72	
4-Chlorophenylphenyl ether	ug/kg	1667.00	1352	81	
Chrysene	ug/kg	1667.00	1303	78	
Dibenz(a,h)anthracene	ug/kg	1667.00	894.3	54	
Dibenzofuran	ug/kg	1667.00	1361	82	
1,2-Dichlorobenzene	ug/kg	1667.00	1101	66	
1,3-Dichlorobenzene	ug/kg	1667.00	1077	65	

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Page: 86 of 108

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NC Drinking Water 37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kinney Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926325457

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
1,4-Dichlorobenzene	ug/kg	1667.00	1103	66	
3,3'-Dichlorobenzidine	ug/kg	3333.00	1082	32	
2,4-Dichlorophenol	ug/kg	1667.00	1350	81	
Diethylphthalate	ug/kg	1667.00	1351	81	
2,4-Dimethylphenol	ug/kg	1667.00	1205	72	
Dimethylphthalate	ug/kg	1667.00	1300	78	
Di-n-butylphthalate	ug/kg	1667.00	1291	77	
4,6-Dinitro-2-methylphenol	ug/kg	1667.00	977.5	59	
2,4-Dinitrophenol	ug/kg	1667.00	198.9	12	
2,4-Dinitrotoluene	ug/kg	1667.00	1279	77	
2,6-Dinitrotoluene	ug/kg	1667.00	1383	83	
Di-n-octylphthalate	ug/kg	1667.00	1198	72	
1,2-Diphenylhydrazine	ug/kg	1667.00	1147	69	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	1331	80	
Fluoranthene	ug/kg	1667.00	1284	77	
Fluorene	ug/kg	1667.00	1279	77	
Hexachloro-1,3-butadiene	ug/kg	1667.00	1385	83	
Hexachlorobenzene	ug/kg	1667.00	1384	83	
Hexachlorocyclopentadiene	ug/kg	1667.00	851.4	51	
Hexachloroethane	ug/kg	1667.00	1197	72	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	845.9	51	
Isophorone	ug/kg	1667.00	2930	176	1
2-Methylnaphthalene	ug/kg	1667.00	1324	80	
2-Methylphenol (o-Cresol)	ug/kg	1667.00	1387	83	
3&4-Methylphenol	ug/kg	1667.00	1346	81	
Naphthalene	ug/kg	1667.00	1190	71	
2-Nitroaniline	ug/kg	1667.00	1108	66	
3-Nitroaniline	ug/kg	1667.00	981.6	59	
4-Nitroaniline	ug/kg	1667.00	1236	74	
Nitrobenzene	ug/kg	1667.00	1438	86	
2-Nitrophenol	ug/kg	1667.00	1238	74	
4-Nitrophenol	ug/kg	1667.00	1611	97	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1450	87	
N-Nitrosodiphenylamine	ug/kg	1667.00	1510	91	
Pentachlorophenol	ug/kg	1667.00	1358	82	
Phenanthrene	ug/kg	1667.00	1246	75	
Phenol	ug/kg	1667.00	1398	84	

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Page: 87 of 108

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Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926325457

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Pyrene	ug/kg	1667.00	1334	80	
1,2,4-Trichlorobenzene	ug/kg	1667.00	1300	78	
2,4,5-Trichlorophenol	ug/kg	1667.00	1470	88	
2,4,6-Trichlorophenol	ug/kg	1667.00	1467	88	
Nitrobenzene-d5 (S)				90	
2-Fluorobiphenyl (S)				89	
Terphenyl-d14 (S)				94	
Phenol-d5 (S)				87	
2-Fluorophenol (S)				75	
2,4,6-Tribromophenol (S)				99	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926325473 926325481

Parameter	Units	926289588 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Acenaphthene	ug/kg	0	1821.00	1091	1097	60	60	1	
4-Chloro-3-methylphenol	ug/kg	0	1821.00	1383	1411	76	78	2	
2-Chlorophenol	ug/kg	0	1821.00	806.3	866.3	44	48	7	
1,4-Dichlorobenzene	ug/kg	0	1821.00	644.9	666.5	35	37	3	
2,4-Dinitrotoluene	ug/kg	0	1821.00	1176	1159	65	64	1	
4-Nitrophenol	ug/kg	0	1821.00	1595	1560	88	86	2	
N-Nitroso-di-n-propylamine	ug/kg	0	1821.00	1081	1113	59	61	3	
Pentachlorophenol	ug/kg	0	1821.00	1464	1490	80	82	2	
Phenol	ug/kg	0	1821.00	974.3	1064	54	58	9	
Pyrene	ug/kg	0	1821.00	1267	1279	70	70	1	
1,2,4-Trichlorobenzene	ug/kg	0	1821.00	851.4	889.6	47	49	4	
Nitrobenzene-d5 (S)						53	56		
2-Fluorobiphenyl (S)						64	67		
Terphenyl-d14 (S)						80	82		
Phenol-d5 (S)						55	59		
2-Fluorophenol (S)						41	42		
2,4,6-Tribromophenol (S)						79	77		

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Page: 88 of 108

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NC Wastewater 12  
NC Drinking Water 37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kinney Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926325465

Parameter	Units	926288515	DUP	RPD	Footnotes
Result	Result				
Acenaphthene	ug/kg	ND	ND	NC	
Acenaphthylene	ug/kg	ND	ND	NC	
Anthracene	ug/kg	ND	ND	NC	
Benzo(k)fluoranthene	ug/kg	ND	ND	NC	
Benzo(b)fluoranthene	ug/kg	ND	ND	NC	
Benzo(a)anthracene	ug/kg	ND	ND	NC	
Benzoic acid	ug/kg	ND	ND	NC	
Benzo(g,h,i)perylene	ug/kg	ND	ND	NC	
Benzyl alcohol	ug/kg	ND	ND	NC	
Benzo(a)pyrene	ug/kg	ND	ND	NC	
4-Bromophenylphenyl ether	ug/kg	ND	ND	NC	
Butylbenzylphthalate	ug/kg	ND	ND	NC	
4-Chloro-3-methylphenol	ug/kg	ND	ND	NC	
4-Chloroaniline	ug/kg	ND	ND	NC	
bis(2-Chloroethoxy)methane	ug/kg	ND	ND	NC	
bis(2-Chloroethyl) ether	ug/kg	ND	ND	NC	
bis(2-Chloroisopropyl) ether	ug/kg	ND	ND	NC	
2-Chloronaphthalene	ug/kg	ND	ND	NC	
2-Chlorophenol	ug/kg	ND	ND	NC	
4-Chlorophenylphenyl ether	ug/kg	ND	ND	NC	
Chrysene	ug/kg	ND	ND	NC	
Dibenz(a,h)anthracene	ug/kg	ND	ND	NC	
Dibenzofuran	ug/kg	ND	ND	NC	
1,2-Dichlorobenzene	ug/kg	ND	ND	NC	
1,3-Dichlorobenzene	ug/kg	ND	ND	NC	
1,4-Dichlorobenzene	ug/kg	ND	ND	NC	
3,3'-Dichlorobenzidine	ug/kg	ND	ND	NC	
2,4-Dichlorophenol	ug/kg	ND	ND	NC	
Diethylphthalate	ug/kg	ND	ND	NC	
2,4-Dimethylphenol	ug/kg	ND	ND	NC	
Dimethylphthalate	ug/kg	ND	ND	NC	
Di-n-butylphthalate	ug/kg	ND	ND	NC	
4,6-Dinitro-2-methylphenol	ug/kg	ND	ND	NC	
2,4-Dinitrophenol	ug/kg	ND	ND	NC	
2,4-Dinitrotoluene	ug/kg	ND	ND	NC	
2,6-Dinitrotoluene	ug/kg	ND	ND	NC	
Di-n-octylphthalate	ug/kg	ND	ND	NC	

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Page: 89 of 108

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9800 Kincey Avenue, Suite 100  
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Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926325465

Parameter	Units	926288515	DUP	RPD	Footnotes
		Result	Result		
1,2-Diphenylhydrazine	ug/kg	ND	ND	NC	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	ND	NC	
Fluoranthene	ug/kg	ND	ND	NC	
Fluorene	ug/kg	ND	ND	NC	
Hexachloro-1,3-butadiene	ug/kg	ND	ND	NC	
Hexachlorobenzene	ug/kg	ND	ND	NC	
Hexachlorocyclopentadiene	ug/kg	ND	ND	NC	
Hexachloroethane	ug/kg	ND	ND	NC	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	NC	
Isophorone	ug/kg	ND	ND	NC	
2-Methylnaphthalene	ug/kg	ND	ND	NC	
2-Methylphenol (o-Cresol)	ug/kg	ND	ND	NC	
3&4-Methylphenol	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	ND	ND	NC	
2-Nitroaniline	ug/kg	ND	ND	NC	
3-Nitroaniline	ug/kg	ND	ND	NC	
4-Nitroaniline	ug/kg	ND	ND	NC	
Nitrobenzene	ug/kg	ND	ND	NC	
2-Nitrophenol	ug/kg	ND	ND	NC	
4-Nitrophenol	ug/kg	ND	ND	NC	
N-Nitroso-di-n-propylamine	ug/kg	ND	ND	NC	
N-Nitrosodiphenylamine	ug/kg	ND	ND	NC	
Pentachlorophenol	ug/kg	ND	ND	NC	
Phenanthrene	ug/kg	ND	ND	NC	
Phenol	ug/kg	ND	ND	NC	
Pyrene	ug/kg	ND	ND	NC	
1,2,4-Trichlorobenzene	ug/kg	ND	ND	NC	
2,4,5-Trichlorophenol	ug/kg	ND	ND	NC	
2,4,6-Trichlorophenol	ug/kg	ND	ND	NC	
Nitrobenzene-d5 (S)	%	60	67		
2-Fluorobiphenyl (S)	%	50	68		
Terphenyl-d14 (S)	%	78	82		
Phenol-d5 (S)	%	51	60		
2-Fluorophenol (S)	%	42	52		
2,4,6-Tribromophenol (S)	%	48	49		

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NC Industrial 37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 142443 Analysis Method: EPA 8270  
QC Batch Method: EPA 3545 Analysis Description: Semivolatile Organics  
Associated Lab Samples: 926288549 926288556

METHOD BLANK: 926327933  
Associated Lab Samples: 926288549 926288556

Parameter	Units	Blank	Reporting	Footnotes
		Result	Limit	
Acenaphthene	ug/kg	ND	330	
Acenaphthylene	ug/kg	ND	330	
Anthracene	ug/kg	ND	330	
Benzo(k)fluoranthene	ug/kg	ND	330	
Benzo(b)fluoranthene	ug/kg	ND	330	
Benzo(a)anthracene	ug/kg	ND	330	
Benzoic acid	ug/kg	ND	1600	
Benzo(g,h,i)perylene	ug/kg	ND	330	
Benzyl alcohol	ug/kg	ND	660	
Benzo(a)pyrene	ug/kg	ND	330	
4-Bromophenylphenyl ether	ug/kg	ND	330	
Butylbenzylphthalate	ug/kg	ND	330	
4-Chloro-3-methylphenol	ug/kg	ND	660	
4-Chloroaniline	ug/kg	ND	660	
bis(2-Chloroethoxy)methane	ug/kg	ND	330	
bis(2-Chloroethyl) ether	ug/kg	ND	330	
bis(2-Chloroisopropyl) ether	ug/kg	ND	330	
2-Chloronaphthalene	ug/kg	ND	330	
2-Chlorophenol	ug/kg	ND	330	
4-Chlorophenylphenyl ether	ug/kg	ND	330	
Chrysene	ug/kg	ND	330	
Dibenz(a,h)anthracene	ug/kg	ND	330	
Dibenzofuran	ug/kg	ND	330	
1,2-Dichlorobenzene	ug/kg	ND	330	
1,3-Dichlorobenzene	ug/kg	ND	330	
1,4-Dichlorobenzene	ug/kg	ND	330	
3,3'-Dichlorobenzidine	ug/kg	ND	660	
2,4-Dichlorophenol	ug/kg	ND	330	
Diethylphthalate	ug/kg	ND	330	
2,4-Dimethylphenol	ug/kg	ND	330	
Dimethylphthalate	ug/kg	ND	330	

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Page: 91 of 108

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 9800 Kinney Avenue, Suite 100  
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 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926327933

Associated Lab Samples: 926288549 926288556

Parameter	Units	Blank Result	Reporting Limit	Footnotes
Di-n-butylphthalate	ug/kg	ND	330	
4,6-Dinitro-2-methylphenol	ug/kg	ND	330	
2,4-Dinitrophenol	ug/kg	ND	1600	
2,4-Dinitrotoluene	ug/kg	ND	330	
2,6-Dinitrotoluene	ug/kg	ND	330	
Di-n-octylphthalate	ug/kg	ND	330	
1,2-Diphenylhydrazine	ug/kg	ND	330	
bis(2-Ethylhexyl)phthalate	ug/kg	ND	330	
Fluoranthene	ug/kg	ND	330	
Fluorene	ug/kg	ND	330	
Hexachloro-1,3-butadiene	ug/kg	ND	330	
Hexachlorobenzene	ug/kg	ND	330	
Hexachlorocyclopentadiene	ug/kg	ND	330	
Hexachloroethane	ug/kg	ND	330	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	330	
Isophorone	ug/kg	ND	330	
2-Methylnaphthalene	ug/kg	ND	330	
2-Methylphenol (o-Cresol)	ug/kg	ND	330	
3&4-Methylphenol	ug/kg	ND	330	
Naphthalene	ug/kg	ND	330	
2-Nitroaniline	ug/kg	ND	1600	
3-Nitroaniline	ug/kg	ND	1600	
4-Nitroaniline	ug/kg	ND	1600	
Nitrobenzene	ug/kg	ND	330	
2-Nitrophenol	ug/kg	ND	330	
4-Nitrophenol	ug/kg	ND	1600	
N-Nitroso-di-n-propylamine	ug/kg	ND	330	
N-Nitrosodiphenylamine	ug/kg	ND	330	
Pentachlorophenol	ug/kg	ND	1600	
Phenanthrene	ug/kg	ND	330	
Phenol	ug/kg	ND	330	
Pyrene	ug/kg	ND	330	
1,2,4-Trichlorobenzene	ug/kg	ND	330	
2,4,5-Trichlorophenol	ug/kg	ND	330	
2,4,6-Trichlorophenol	ug/kg	ND	330	
Nitrobenzene-d5 (S)	%	80		

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Page: 92 of 108

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 NC Drinking Water 37712

Charlotte Certification IDs  
 NC Wastewater 12  
 NC Drinking Water 37706

## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
 9800 Kincey Avenue, Suite 100  
 Huntersville, NC 28078  
 Phone: 704.875.9092  
 Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926327933

Associated Lab Samples: 926288549      926288556

<u>Parameter</u>	<u>Units</u>	<u>Blank</u>	<u>Reporting</u>	
		<u>Result</u>	<u>Limit</u>	<u>Footnotes</u>
2-Fluorobiphenyl (S)	%	70		
Terphenyl-d14 (S)	%	69		
Phenol-d5 (S)	%	71		
2-Fluorophenol (S)	%	70		
2,4,6-Tribromophenol (S)	%	75		

LABORATORY CONTROL SAMPLE: 926327941

<u>Parameter</u>	<u>Units</u>	<u>Spike</u>	<u>LCS</u>	<u>LCS</u>	<u>% Rec</u>	<u>Footnotes</u>
		<u>Conc.</u>	<u>Result</u>	<u>% Rec</u>		
Acenaphthene	ug/kg	1667.00	1056	63		
Acenaphthylene	ug/kg	1667.00	1027	62		
Anthracene	ug/kg	1667.00	1163	70		
Benzo(k)fluoranthene	ug/kg	1667.00	1090	65		
Benzo(b)fluoranthene	ug/kg	1667.00	1052	63		
Benzo(a)anthracene	ug/kg	1667.00	1173	70		
Benzoic acid	ug/kg	1667.00	779.8	47		
Benzo(g,h,i)perylene	ug/kg	1667.00	1084	65		
Benzyl alcohol	ug/kg	1667.00	1182	71		
Benzo(a)pyrene	ug/kg	1667.00	1161	70		
4-Bromophenylphenyl ether	ug/kg	1667.00	1207	72		
Butylbenzylphthalate	ug/kg	1667.00	1095	66		
4-Chloro-3-methylphenol	ug/kg	1667.00	1287	77		
4-Chloroaniline	ug/kg	1667.00	1047	63		
bis(2-Chloroethoxy)methane	ug/kg	1667.00	1014	61		
bis(2-Chloroethyl) ether	ug/kg	1667.00	846.6	51		
bis(2-Chloroisopropyl) ether	ug/kg	1667.00	961.8	58		
2-Chloronaphthalene	ug/kg	1667.00	1037	62		
2-Chlorophenol	ug/kg	1667.00	848.6	51		
4-Chlorophenylphenyl ether	ug/kg	1667.00	1211	73		
Chrysene	ug/kg	1667.00	1160	70		
Dibenz(a,h)anthracene	ug/kg	1667.00	1244	75		
Dibenzofuran	ug/kg	1667.00	1157	69		
1,2-Dichlorobenzene	ug/kg	1667.00	799.9	48		
1,3-Dichlorobenzene	ug/kg	1667.00	774.0	46		

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Page: 93 of 108

## REPORT OF LABORATORY ANALYSIS

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### Asheville Certification IDs

NC Wastewater 40  
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Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
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## QUALITY CONTROL DATA

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926327941

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
1,4-Dichlorobenzene	ug/kg	1667.00	783.9	47	
3,3'-Dichlorobenzidine	ug/kg	3333.00	1009	30	
2,4-Dichlorophenol	ug/kg	1667.00	1081	65	
Diethylphthalate	ug/kg	1667.00	1199	72	
2,4-Dimethylphenol	ug/kg	1667.00	1133	68	
Dimethylphthalate	ug/kg	1667.00	1138	68	
Di-n-butylphthalate	ug/kg	1667.00	1128	68	
4,6-Dinitro-2-methylphenol	ug/kg	1667.00	1095	66	
2,4-Dinitrophenol	ug/kg	1667.00	761.7	46	
2,4-Dinitrotoluene	ug/kg	1667.00	1094	66	
2,6-Dinitrotoluene	ug/kg	1667.00	1190	71	
Di-n-octylphthalate	ug/kg	1667.00	1033	62	
1,2-Diphenylhydrazine	ug/kg	1667.00	1044	63	
bis(2-Ethylhexyl)phthalate	ug/kg	1667.00	1142	68	
Fluoranthene	ug/kg	1667.00	1151	69	
Fluorene	ug/kg	1667.00	1094	66	
Hexachloro-1,3-butadiene	ug/kg	1667.00	1041	62	
Hexachlorobenzene	ug/kg	1667.00	1263	76	
Hexachlorocyclopentadiene	ug/kg	1667.00	976.3	59	
Hexachloroethane	ug/kg	1667.00	883.7	53	
Indeno(1,2,3-cd)pyrene	ug/kg	1667.00	1144	69	
Isophorone	ug/kg	1667.00	2420	145 1	
2-Methylnaphthalene	ug/kg	1667.00	1009	60	
2-Methylphenol (o-Cresol)	ug/kg	1667.00	985.7	59	
3&4-Methylphenol	ug/kg	1667.00	1015	61	
Naphthalene	ug/kg	1667.00	843.0	51	
2-Nitroaniline	ug/kg	1667.00	954.0	57	
3-Nitroaniline	ug/kg	1667.00	877.4	53	
4-Nitroaniline	ug/kg	1667.00	992.9	60	
Nitrobenzene	ug/kg	1667.00	1060	64	
2-Nitrophenol	ug/kg	1667.00	904.4	54	
4-Nitrophenol	ug/kg	1667.00	1424	85	
N-Nitroso-di-n-propylamine	ug/kg	1667.00	1121	67	
N-Nitrosodiphenylamine	ug/kg	1667.00	1120	67	
Pentachlorophenol	ug/kg	1667.00	1236	74	
Phenanthrene	ug/kg	1667.00	1089	65	
Phenol	ug/kg	1667.00	1002	60	

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Page: 94 of 108

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
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Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926327941

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Pyrene	ug/kg	1667.00	1091	66	
1,2,4-Trichlorobenzene	ug/kg	1667.00	930.8	56	
2,4,5-Trichlorophenol	ug/kg	1667.00	1259	76	
2,4,6-Trichlorophenol	ug/kg	1667.00	1245	75	
Nitrobenzene-d5 (S)				67	
2-Fluorobiphenyl (S)				71	
Terphenyl-d14 (S)				78	
Phenol-d5 (S)				63	
2-Fluorophenol (S)				55	
2,4,6-Tribromophenol (S)				94	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926327958 926327966

Parameter	Units	926288556 Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	RPD	Footnotes
Acenaphthene	ug/kg	0	1879.00	1169	1013	62	54	14	
4-Chloro-3-methylphenol	ug/kg	0	1879.00	1400	1160	74	62	19	
2-Chlorophenol	ug/kg	0	1879.00	1201	1032	64	55	15	
1,4-Dichlorobenzene	ug/kg	0	1879.00	1155	1051	62	56	9	
2,4-Dinitrotoluene	ug/kg	0	1879.00	1187	1040	63	55	13	
4-Nitrophenol	ug/kg	0	1879.00	1448	1278	77	68	12	
N-Nitroso-di-n-propylamine	ug/kg	0	1879.00	1386	1209	74	64	14	
Pentachlorophenol	ug/kg	0	1879.00	1247	1021	66	54	20	
Phenol	ug/kg	0	1879.00	1345	1178	72	63	13	
Pyrene	ug/kg	0	1879.00	1148	1018	61	54	12	
1,2,4-Trichlorobenzene	ug/kg	0	1879.00	1315	1206	70	64	9	
Nitrobenzene-d5 (S)						79	75		
2-Fluorobiphenyl (S)						74	66		
Terphenyl-d14 (S)						72	66		
Phenol-d5 (S)						73	66		
2-Fluorophenol (S)						65	62		
2,4,6-Tribromophenol (S)						82	68		

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Page: 95 of 108

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NC Drinking Water 37706  
COE 111-00000

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**Pace Analytical Services, Inc.**  
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 Huntersville, NC 28078  
 Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926327974

<u>Parameter</u>	<u>Units</u>	<u>926298399</u>		<u>DUP</u>	<u>Footnotes</u>
		<u>Result</u>	<u>Result</u>	<u>RPD</u>	
Acenaphthene	ug/kg	ND	ND	NC	
Acenaphthylene	ug/kg	ND	ND	NC	
Anthracene	ug/kg	ND	ND	NC	
Benzo(a)anthracene	ug/kg	ND	ND	NC	
Benzo(a)pyrene	ug/kg	ND	ND	NC	
Benzo(b)fluoranthene	ug/kg	ND	ND	NC	
Benzo(g,h,i)perylene	ug/kg	ND	ND	NC	
Benzo(k)fluoranthene	ug/kg	ND	ND	NC	
Chrysene	ug/kg	ND	ND	NC	
Dibenz(a,h)anthracene	ug/kg	ND	ND	NC	
Fluoranthene	ug/kg	ND	ND	NC	
Fluorene	ug/kg	ND	ND	NC	
Indeno(1,2,3-cd)pyrene	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	ND	ND	NC	
Phenanthrene	ug/kg	ND	ND	NC	
Pyrene	ug/kg	ND	ND	NC	
Nitrobenzene-d5 (S)	%	25	38		
2-Fluorobiphenyl (S)	%	44	33		
Terphenyl-d14 (S)	%	69	48		
2-Methylnaphthalene	ug/kg		ND	NC	

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Pace Analytical Services, Inc.  
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Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 142181	Analysis Method: EPA 8260				
QC Batch Method: EPA 8260	Analysis Description: GC/MS VOCs 5035/8260 low level				
Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499
	926288507	926288515	926288523	926288531	926288549
	926288556				

METHOD BLANK: 926316035

Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499	926288507	926288515
	926288523	926288531	926288549	926288556			

Parameter	Units	Blank	Reporting	
		Result	Limit	Footnotes
Acetone	ug/kg	ND	100	
Benzene	ug/kg	ND	5.0	
Bromobenzene	ug/kg	ND	5.0	
Bromochloromethane	ug/kg	ND	5.0	
Bromodichloromethane	ug/kg	ND	5.0	
Bromoform	ug/kg	ND	5.0	
Bromomethane	ug/kg	ND	10.	
2-Butanone (MEK)	ug/kg	ND	100	
n-Butylbenzene	ug/kg	ND	5.0	
sec-Butylbenzene	ug/kg	ND	5.0	
tert-Butylbenzene	ug/kg	ND	5.0	
Carbon tetrachloride	ug/kg	ND	5.0	
Chlorobenzene	ug/kg	ND	5.0	
Chloroethane	ug/kg	ND	10.	
Chloroform	ug/kg	ND	5.0	
Chloromethane	ug/kg	ND	10.	
2-Chlorotoluene	ug/kg	ND	5.0	
4-Chlorotoluene	ug/kg	ND	5.0	
1,2-Dibromo-3-chloropropane	ug/kg	ND	5.0	
Dibromochloromethane	ug/kg	ND	5.0	
1,2-Dibromoethane (EDB)	ug/kg	ND	5.0	
Dibromomethane	ug/kg	ND	5.0	
1,2-Dichlorobenzene	ug/kg	ND	5.0	
1,3-Dichlorobenzene	ug/kg	ND	5.0	
1,4-Dichlorobenzene	ug/kg	ND	5.0	
Dichlorodifluoromethane	ug/kg	ND	10.	
1,1-Dichloroethane	ug/kg	ND	5.0	
1,2-Dichloroethane	ug/kg	ND	5.0	

Date: 11/14/05

Page: 97 of 108

## REPORT OF LABORATORY ANALYSIS

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## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
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 Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926316035

Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499	926288507	926288515
	926288523	926288531	926288549	926288556			

<b>Parameter</b>	<b>Units</b>	<b>Blank</b>	<b>Reporting</b>	
		<b>Result</b>	<b>Limit</b>	<b>Footnotes</b>
1,1-Dichloroethene	ug/kg	ND	5.0	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	
1,2-Dichloropropane	ug/kg	ND	5.0	
1,3-Dichloropropane	ug/kg	ND	5.0	
2,2-Dichloropropane	ug/kg	ND	5.0	
1,1-Dichloropropene	ug/kg	ND	5.0	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	
Diisopropyl ether	ug/kg	ND	5.0	
Ethylbenzene	ug/kg	ND	5.0	
Hexachloro-1,3-butadiene	ug/kg	ND	5.0	
2-Hexanone	ug/kg	ND	50.	
Isopropylbenzene (Cumene)	ug/kg	ND	5.0	
p-Isopropyltoluene	ug/kg	ND	5.0	
Methylene chloride	ug/kg	ND	5.0	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	50.	
Methyl-tert-butyl ether	ug/kg	ND	5.0	
Naphthalene	ug/kg	ND	5.0	
n-Propylbenzene	ug/kg	ND	5.0	
Styrene	ug/kg	ND	5.0	
1,1,1,2-Tetrachloroethane	ug/kg	ND	5.0	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	
Tetrachloroethene	ug/kg	ND	5.0	
Toluene	ug/kg	ND	5.0	
1,2,3-Trichlorobenzene	ug/kg	ND	5.0	
1,2,4-Trichlorobenzene	ug/kg	ND	5.0	
1,1,1-Trichloroethane	ug/kg	ND	5.0	
1,1,2-Trichloroethane	ug/kg	ND	5.0	
Trichloroethene	ug/kg	ND	5.0	
Trichlorofluoromethane	ug/kg	ND	5.0	
1,2,3-Trichloropropane	ug/kg	ND	5.0	
1,2,4-Trimethylbenzene	ug/kg	ND	5.0	
1,3,5-Trimethylbenzene	ug/kg	ND	5.0	
Vinyl acetate	ug/kg	ND	50.	

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Page: 98 of 108

## REPORT OF LABORATORY ANALYSIS

Asheville Certification IDs  
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## QUALITY CONTROL DATA

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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

METHOD BLANK: 926316035

Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499	926288507	926288515
	926288523	926288531	926288549	926288556			

Parameter	Units	Blank	Reporting	
		Result	Limit	Footnotes
Vinyl chloride	ug/kg	ND	10.	
Xylene (Total)	ug/kg	ND	5.0	
m&p-Xylene	ug/kg	ND	10.	
o-Xylene	ug/kg	ND	5.0	
Toluene-d8 (S)	¶	98		
4-Bromofluorobenzene (S)	¶	95		
Dibromofluoromethane (S)	¶	108		
1,2-Dichloroethane-d4 (S)	¶	107		

LABORATORY CONTROL SAMPLE: 926316043

Parameter	Units	Spike	LCS	LCS	
		Conc.	Result	% Rec	Footnotes
Acetone	ug/kg	100.00	97.86	98	
Benzene	ug/kg	50.00	45.79	92	
Bromobenzene	ug/kg	50.00	51.36	103	
Bromochloromethane	ug/kg	50.00	47.06	94	
Bromodichloromethane	ug/kg	50.00	47.06	94	
Bromoform	ug/kg	50.00	50.53	101	
Bromomethane	ug/kg	50.00	56.62	113	
2-Butanone (MEK)	ug/kg	100.00	91.41	91	
n-Butylbenzene	ug/kg	50.00	44.12	88	
sec-Butylbenzene	ug/kg	50.00	53.62	107	
tert-Butylbenzene	ug/kg	50.00	53.70	107	
Carbon tetrachloride	ug/kg	50.00	47.79	96	
Chlorobenzene	ug/kg	50.00	47.08	94	
Chloroethane	ug/kg	50.00	25.96	52	
Chloroform	ug/kg	50.00	49.92	100	
Chloromethane	ug/kg	50.00	45.25	90	
2-Chlorotoluene	ug/kg	50.00	50.12	100	
4-Chlorotoluene	ug/kg	50.00	48.06	96	
1,2-Dibromo-3-chloropropane	ug/kg	50.00	50.81	102	
Dibromochloromethane	ug/kg	50.00	49.33	99	
1,2-Dibromoethane (EDB)	ug/kg	50.00	51.80	104	

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Page: 99 of 108

## REPORT OF LABORATORY ANALYSIS

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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926316043

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Dibromomethane	ug/kg	50.00	48.35	97	
1,2-Dichlorobenzene	ug/kg	50.00	46.29	93	
1,3-Dichlorobenzene	ug/kg	50.00	45.84	92	
1,4-Dichlorobenzene	ug/kg	50.00	45.81	92	
Dichlorodifluoromethane	ug/kg	50.00	40.28	81	
1,1-Dichloroethane	ug/kg	50.00	48.74	98	
1,2-Dichloroethane	ug/kg	50.00	48.66	97	
1,1-Dichloroethene	ug/kg	50.00	51.42	103	
cis-1,2-Dichloroethene	ug/kg	50.00	43.77	88	
trans-1,2-Dichloroethene	ug/kg	50.00	46.36	93	
1,2-Dichloropropane	ug/kg	50.00	49.20	98	
1,3-Dichloropropane	ug/kg	50.00	52.23	104	
2,2-Dichloropropane	ug/kg	50.00	39.37	79	
1,1-Dichloropropene	ug/kg	50.00	50.20	100	
cis-1,3-Dichloropropene	ug/kg	50.00	47.14	94	
trans-1,3-Dichloropropene	ug/kg	50.00	45.97	92	
Diisopropyl ether	ug/kg	50.00	46.70	93	
Ethylbenzene	ug/kg	50.00	46.18	92	
Hexachloro-1,3-butadiene	ug/kg	50.00	49.40	99	
2-Hexanone	ug/kg	100.00	137.4	137	
Isopropylbenzene (Cumene)	ug/kg	50.00	53.49	107	
p-Isopropyltoluene	ug/kg	50.00	46.18	92	
Methylene chloride	ug/kg	50.00	52.53	105	
4-Methyl-2-pentanone (MIBK)	ug/kg	100.00	108.5	108	
Methyl-tert-butyl ether	ug/kg	50.00	46.73	94	
Naphthalene	ug/kg	50.00	44.08	88	
n-Propylbenzene	ug/kg	50.00	50.86	102	
Styrene	ug/kg	50.00	49.84	100	
1,1,1,2-Tetrachloroethane	ug/kg	50.00	49.20	98	
1,1,2,2-Tetrachloroethane	ug/kg	50.00	49.86	100	
Tetrachloroethene	ug/kg	50.00	46.82	94	
Toluene	ug/kg	50.00	43.26	86	
1,2,3-Trichlorobenzene	ug/kg	50.00	45.01	90	
1,2,4-Trichlorobenzene	ug/kg	50.00	39.76	80	
1,1,1-Trichloroethane	ug/kg	50.00	47.96	96	
1,1,2-Trichloroethane	ug/kg	50.00	50.73	101	
Trichloroethene	ug/kg	50.00	46.03	92	

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Page: 100 of 108

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NC Drinking Water 37706



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

LABORATORY CONTROL SAMPLE: 926316043

Parameter	Units	Spike Conc.	LCS Result	% Rec	Footnotes
Trichlorofluoromethane	ug/kg	50.00	49.11	98	
1,2,3-Trichloropropane	ug/kg	50.00	51.16	102	
1,2,4-Trimethylbenzene	ug/kg	50.00	43.89	88	
1,3,5-Trimethylbenzene	ug/kg	50.00	45.29	91	
Vinyl acetate	ug/kg	100.00	16.93	17	3
Vinyl chloride	ug/kg	50.00	42.99	86	
Xylene (Total)	ug/kg	150.00	139.3	93	
m&p-Xylene	ug/kg	100.00	92.15	92	
o-Xylene	ug/kg	50.00	47.11	94	
Toluene-d8 (S)				99	
4-Bromofluorobenzene (S)				97	
Dibromofluoromethane (S)				102	
1,2-Dichloroethane-d4 (S)				99	

MATRIX SPIKE: 926319609

Parameter	Units	926288523		Spike Conc.	MS Result	MS % Rec	Footnotes
		Result	Conc.				
Benzene	ug/kg	0	51.57	49.29	96		
Chlorobenzene	ug/kg	0	51.57	54.00	105		
1,1-Dichloroethene	ug/kg	0	51.57	55.75	108		
Toluene	ug/kg	0	51.57	45.90	89		
Trichloroethene	ug/kg	0	51.57	47.94	93		
Toluene-d8 (S)					95		
4-Bromofluorobenzene (S)					103		
Dibromofluoromethane (S)					98		
1,2-Dichloroethane-d4 (S)					97		

SAMPLE DUPLICATE: 926319617

Parameter	Units	926298357		DUP	Footnotes
		Result	Result	RPD	
Acetone	ug/kg	ND	ND	NC	
Benzene	ug/kg	ND	ND	NC	
Bromobenzene	ug/kg	ND	ND	NC	

Date: 11/14/05

Page: 101 of 108

## REPORT OF LABORATORY ANALYSIS

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Asheville Certification IDs  
NC Wastewater 40  
NC Drinking Water 37712

Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706



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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926319617

Parameter	Units	926298357	DUP	RPD	Footnotes
Result	Result				
Bromochloromethane	ug/kg	ND	ND	NC	
Bromodichloromethane	ug/kg	ND	ND	NC	
Bromoform	ug/kg	ND	ND	NC	
Bromomethane	ug/kg	ND	ND	NC	
2-Butanone (MEK)	ug/kg	ND	ND	NC	
n-Butylbenzene	ug/kg	ND	ND	NC	
sec-Butylbenzene	ug/kg	ND	ND	NC	
tert-Butylbenzene	ug/kg	ND	ND	NC	
Carbon tetrachloride	ug/kg	ND	ND	NC	
Chlorobenzene	ug/kg	ND	ND	NC	
Chloroethane	ug/kg	ND	ND	NC	
Chloroform	ug/kg	ND	ND	NC	
Chloromethane	ug/kg	ND	ND	NC	
2-Chlorotoluene	ug/kg	ND	ND	NC	
4-Chlorotoluene	ug/kg	ND	ND	NC	
1,2-Dibromo-3-chloropropane	ug/kg	ND	ND	NC	
Dibromochloromethane	ug/kg	ND	ND	NC	
1,2-Dibromoethane (EDB)	ug/kg	ND	ND	NC	
Dibromomethane	ug/kg	ND	ND	NC	
1,2-Dichlorobenzene	ug/kg	ND	ND	NC	
1,3-Dichlorobenzene	ug/kg	ND	ND	NC	
1,4-Dichlorobenzene	ug/kg	ND	ND	NC	
Dichlorodifluoromethane	ug/kg	ND	ND	NC	
1,1-Dichloroethane	ug/kg	ND	ND	NC	
1,2-Dichloroethane	ug/kg	ND	ND	NC	
1,1-Dichloroethene	ug/kg	ND	ND	NC	
cis-1,2-Dichloroethene	ug/kg	ND	ND	NC	
trans-1,2-Dichloroethene	ug/kg	ND	ND	NC	
1,2-Dichloropropane	ug/kg	ND	ND	NC	
1,3-Dichloropropane	ug/kg	ND	ND	NC	
2,2-Dichloropropane	ug/kg	ND	ND	NC	
1,1-Dichloropropene	ug/kg	ND	ND	NC	
cis-1,3-Dichloropropene	ug/kg	ND	ND	NC	
trans-1,3-Dichloropropene	ug/kg	ND	ND	NC	
Diisopropyl ether	ug/kg	ND	ND	NC	
Ethylbenzene	ug/kg	ND	ND	NC	
Hexachloro-1,3-butadiene	ug/kg	ND	ND	NC	

Date: 11/14/05

Page: 102 of 108

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NC Wastewater 40  
NC Drinking Water 37712

### Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706



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Phone: 704.875.9092  
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Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

SAMPLE DUPLICATE: 926319617

Parameter	Units	926298357	DUP	RPD	Footnotes
Result	Result				
2-Hexanone	ug/kg	ND	ND	NC	
Isopropylbenzene (Cumene)	ug/kg	ND	ND	NC	
p-Isopropyltoluene	ug/kg	ND	ND	NC	
Methylene chloride	ug/kg	13.00	ND	NC	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	ND	NC	
Methyl-tert-butyl ether	ug/kg	ND	ND	NC	
Naphthalene	ug/kg	ND	ND	NC	
n-Propylbenzene	ug/kg	ND	ND	NC	
Styrene	ug/kg	ND	ND	NC	
1,1,1,2-Tetrachloroethane	ug/kg	ND	ND	NC	
1,1,2,2-Tetrachloroethane	ug/kg	ND	ND	NC	
Tetrachloroethene	ug/kg	ND	ND	NC	
Toluene	ug/kg	ND	ND	NC	
1,2,3-Trichlorobenzene	ug/kg	ND	ND	NC	
1,2,4-Trichlorobenzene	ug/kg	ND	ND	NC	
1,1,1-Trichloroethane	ug/kg	ND	ND	NC	
1,1,2-Trichloroethane	ug/kg	ND	ND	NC	
Trichloroethene	ug/kg	ND	ND	NC	
Trichlorofluoromethane	ug/kg	ND	ND	NC	
1,2,3-Trichloropropane	ug/kg	ND	ND	NC	
1,2,4-Trimethylbenzene	ug/kg	ND	ND	NC	
1,3,5-Trimethylbenzene	ug/kg	ND	ND	NC	
Vinyl acetate	ug/kg	ND	ND	NC	
Vinyl chloride	ug/kg	ND	ND	NC	
Xylene (Total)	ug/kg	ND	ND	NC	
m&p-Xylene	ug/kg	ND	ND	NC	
o-Xylene	ug/kg	ND	ND	NC	
Toluene-d8 (S)	%	98	98		
4-Bromofluorobenzene (S)	%	85	100		
Dibromofluoromethane (S)	%	108	104		
1,2-Dichloroethane-d4 (S)	%	96	99		

Date: 11/14/05

Page: 103 of 108

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Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 141590 Analysis Method: EPA 200.7  
QC Batch Method: SM 3030C Analysis Description: 3030C Metals, ICP, Trace  
Associated Lab Samples: 926288564

METHOD BLANK: 926288903  
Associated Lab Samples: 926288564

Parameter	Units	Blank	Reporting	Footnotes
		Result	Limit	
Chromium, 3030C	mg/l	ND	0.0020	
Lead, 3030C	mg/l	ND	0.0050	

LABORATORY CONTROL SAMPLE: 926288911

Parameter	Units	Spike	LCS	LCS	Footnotes
		Conc.	Result	% Rec	
Chromium, 3030C	mg/l	0.5000	0.5020	100	
Lead, 3030C	mg/l	0.5000	0.5040	101	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926288929 926288937

Parameter	Units	926288564	Spike	MS	MSD	MS	MSD	RPD	Footnotes
		Result	Conc.	Result	Result	% Rec	% Rec		
Chromium, 3030C	mg/l	0.7640	0.5000	1.130	1.180	73	83	4	
Lead, 3030C	mg/l	3.600	0.5000	3.990	3.900	78	60	2	4

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Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 141594	Analysis Method: EPA 6010				
QC Batch Method: EPA 3050	Analysis Description: Metals, Trace ICP				
Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499
	926288507	926288515	926288523	926288531	926288549
	926288556				

METHOD BLANK: 926289083

Associated Lab Samples:	926288457	926288465	926288473	926288481	926288499	926288507	926288515
	926288523	926288531	926288549	926288556			

Parameter	Units	Blank	Reporting	
		Result	Limit	Footnotes
Chromium	mg/kg	ND	0.20	
Lead	mg/kg	ND	0.50	

LABORATORY CONTROL SAMPLE: 926289091

Parameter	Units	Spike	LCS	LCS	
		Conc.	Result	% Rec	Footnotes
Chromium	mg/kg	50.00	51.70	103	
Lead	mg/kg	50.00	50.80	102	

MATRIX SPIKE &amp; MATRIX SPIKE DUPLICATE: 926289109 926289117

Parameter	Units	926284845	Spike	MS	MSD	MS	MSD		
		Result	Conc.	Result	Result	% Rec	% Rec	RPD	Footnotes
Chromium	mg/kg	12.61	231.20	233.0	234.8	95	89	1	
Lead	mg/kg	3.655	231.20	229.4	232.1	98	92	1	

SAMPLE DUPLICATE: 926289125

Parameter	Units	926288457	DUP		
		Result	Result	RPD	Footnotes
Chromium	mg/kg	85.00	81.00	4	
Lead	mg/kg	10.00	8.600	17	

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NC Drinking Water 37712

Charlotte Certification IDs  
NC Wastewater 12  
NC Drinking Water 37706



## QUALITY CONTROL DATA

**Pace Analytical Services, Inc.**  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

QC Batch: 141604	Analysis Method: % Moisture
QC Batch Method:	Analysis Description: Percent Moisture
Associated Lab Samples:	926288457 926288465 926288473 926288481 926288499
	926288507 926288515 926288523 926288531

SAMPLE DUPLICATE: 926289331

Parameter	Units	926287954	DUP	RPD	Footnotes
		Result	Result		
Percent Moisture	%	11.50	11.70	2	

Date: 11/14/05

Page: 106 of 108

## REPORT OF LABORATORY ANALYSIS

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Asheville Certification IDs  
NC Wastewater 40  
NC Drinking Water 37712

Charlotte Certification IDs  
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NC Drinking Water 37706

*LEO IN ACCORDANCE*



## QUALITY CONTROL DATA

Pace Analytical Services, Inc.  
9800 Kincey Avenue, Suite 100  
Huntersville, NC 28078  
Phone: 704.875.9092  
Fax: 704.875.9091

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

---

QC Batch: 141621	Analysis Method: % Moisture
QC Batch Method:	Analysis Description: Percent Moisture
Associated Lab Samples:	926288549      926288556

---

SAMPLE DUPLICATE: 926289554

Parameter	Units	926288549	DUP	Result	Result	RPD	Footnotes
Percent Moisture	%			8.100	5.800	33	

Date: 11/14/05

Page: 107 of 108

## REPORT OF LABORATORY ANALYSIS

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TEST IN ACCORDANCE

### Asheville Certification IDs

NC Wastewater 40  
NC Drinking Water 37712

### Charlotte Certification IDs

NC Wastewater 12  
NC Drinking Water 37706

Lab Project Number: 92106545

Client Project ID: MultiModal Rail/WBS#32179

---

## QUALITY CONTROL DATA PARAMETER FOOTNOTES

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

- LCS(D) Laboratory Control Sample (Duplicate)  
MS(D) Matrix Spike (Duplicate)  
DUP Sample Duplicate  
ND Not detected at or above adjusted reporting limit  
NC Not Calculable  
J Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit  
MDL Adjusted Method Detection Limit  
RPD Relative Percent Difference  
(S) Surrogate  
[1] Recovery falls outside of QC limits, however, this compound is not found in the associated samples.  
[2] The surrogate and/or spike recovery was outside acceptance limits.  
[3] The method required sample preservation degrades this compound, therefore acceptable recoveries may not be achieved in sample matrix spikes.  
[4] The spike recovery was outside acceptance limits for the MS and /or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

## REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services - Charlotte

TENTATIVELY IDENTIFIED COMPOUNDS

Client Name: 92-GEL  
Lab Smp Id: 926288564  
Operator : BET  
Sample Location:  
Sample Matrix: WATER  
Analysis Type: SV

Client SDG: 92106545  
Client Smp ID: SB-50-GW  
Sample Date: 31-OCT-2005  
Sample Point:  
Date Received: 01-NOV-2005 00:00  
Level: LOW

Number TICs found: 25

CONCENTRATION UNITS:  
(ug/L or ug/KG) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	8.258	27.0	-J-
2.	Unknown	8.532	26.6	-J-
3.	Unknown	8.687	36.1	-J-
4.	Methylnaphthalene isomer	8.857	21.1	81J-
5.	Unknown	9.034	9.78	-J-
6.	Unknown	9.086	18.3	-J-
7.	Unknown Alkane	9.286	39.4	-J-
8.	Unknown	10.128	54.3	-J-
9.	Dimethylnaphthalene isomer	10.491	15.8	94J-
10.	Unknown	10.535	13.3	-J-
11.	Unknown Alkane	11.023	10.3	-J-
12.	Unknown	11.141	17.2	-J-
13.	Trimethylnaphthalene isomer	11.208	9.98	94J-
14.	Trimethylnaphthalene isomer	11.370	38.8	96J-
15.	Unknown	11.799	9.36	-J-
16.	Unknown	11.925	33.3	-J-
17.	Unknown	12.331	10.8	-J-
18.	Unknown Alkane	12.464	46.2	-J-
19.	Unknown PAH	12.701	10.2	-J-
20.	Unknown	12.856	9.74	-J-
21.	Unknown	12.982	12.0	-J-
22.	Unknown Alkane	13.366	288	-J-
23.	Unknown	13.913	140	-J-
24.	Unknown Alkane	14.039	144	-J-
25.	Unknown PAH	14.734	136	-J-

# 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  
898140

## Section A

Required Client Information:  
**General Engineering/MCOT**  
 Address: P.O. BOX 74262 RTP, NC 27709  
 Email To: 919-544-1102  
 Phone: 919-544-7755 Fax: 919-544-7709

Report To: **CORI HAMBURG**  
 Copy To: **NPDES MBS 32177**  
 Project Name: **WBS 32177**  
 Address:

Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:  
**Project Number: 010052**

SITE LOCATION	<input type="checkbox"/> GA	<input type="checkbox"/> IL	<input type="checkbox"/> IN	<input type="checkbox"/> MI	<input type="checkbox"/> MN	<input checked="" type="checkbox"/> NC
	<input type="checkbox"/> OH	<input type="checkbox"/> SC	<input type="checkbox"/> UT	<input type="checkbox"/> OTHER		

**REGULATORY AGENCY**  
 NPDES  
 GROUND WATER  
 RCRA  
 DRINKING WATER  
 Other

**Filtered (Y/N)**  
 Requested Analysis:  
~~PCP/COC~~  
~~Metal Trace~~  
~~EPA 602~~  
~~EPA 603~~  
~~EPA 603 + 1D AC~~  
~~Residual Chlorine (Y/N)~~

Pace Project Number  
 Lab I.D.

Invoice Information:  
**WB3** Purchase Order No: 779  
**WBS Mod 1 Rail**

Requested Due Date/TAT:  
**2005-01-05**

# OF CONTAINERS  
 Preservatives

Unpreserved					
H <sub>2</sub> SO <sub>4</sub>					
HNO <sub>3</sub>					
HCl					
NaOH					
Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>					
Methanol					
Other					

Temp in °C  
 Received on Ice  
 Custody Sealed Cooler  
 Samples Intact

Attention:  
**Cori Hamburg**

Pace Quote Reference:  
 Pace Project Manager:  
 Pace Profile #:

**Site of Analysis:**  
~~PCP/COC~~  
~~Metal Trace~~  
~~EPA 602~~  
~~EPA 603~~  
~~EPA 603 + 1D AC~~  
~~Residual Chlorine (Y/N)~~

Pace Project Number  
 Lab I.D.

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**Site of Analysis:**  
~~PCP/COC~~  
~~Metal Trace~~  
~~EPA 602~~  
~~EPA 603~~  
~~EPA 603 + 1D AC~~  
~~Residual Chlorine (Y/N)~~

Pace Project Number  
 Lab I.D.

Report To: **CORI HAMBURG**  
 Copy To: **NPDES MBS 32177**  
 Project Name: **WBS 32177**  
 Address:

Pace Quote Reference:  
 Pace Project Manager:  
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~~EPA 603~~  
~~EPA 603 + 1D AC~~  
~~Residual Chlorine (Y/N)~~

Pace Project Number  
 Lab I.D.

Additional Comments:  
 EMA samples analyzed for us.  
 by Lee Miller, AS

SAMPLER NAME AND SIGNATURE  
 CORI HAMBURG  
 DATE Signed (MM/DD/YY)

# **CHAIN-OF-CUSTODY / Analytical Request Document**

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

Section A

#### Required Client Information:

## Section B

## **Required Project Information:**

Section C

## Invoice Information

#### **Additional Comments:**